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The Relation of Science and Values.

(Being a brief consideration of the history of their separation).

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The problem of the relation of science and values is essentially a modern one. Through the successive stages of Greek philosophy the focus of attention shifted from the origin and the constitution of the external world to the nature and powers of the human "soul," from theoretical speculations concerning the nature of things to the scrutiny of the principles of action,—emphasis was laid now on those interests which are today conceded to science, and again on the values of aesthetics, ethics and religion, but the same methods and tests of investigation and interpretation were applied indifferently in both realms. Whether in regard to cosmological reality or ethical truth the early philosophers applied each to his own system the designation of knowledge, and the term opinion was reserved for contemptuous reference to the unconsidered conventions and prejudices of the popular mind, and it must be confessed, to the systematic reflections of opposing thinkers, as well. There is, moreover, from first to last, a marked tendency to attribute the unreliability of opinion to the inadequacy of experience as a source of knowledge, and to find the warrant of truth in a rational factor transcending in its authority the testimony of the senses. The accepted process of knowledge was deduction, and with this process science was identified. No question here, then, as to the legitimacy of admitting science as the method of values.

"Unless a person can strictly define by a process of thought the essential Form of the Good," Plato says, "and unless he can fight his way, as it were, through all objections, studying to disprove them not by the rules of opinion, but by those of real existence; and unless in all these conflicts he travels to his conclusion without making one false step in his train of thought,—unless he does all this, shall you not assert that he knows neither the essence of the good nor any other good thing; and that any phantom of it which he may chance to apprehend, is the fruit of opinion and not of science. . . . ?" and Aristotle, though he repudiates

much of Plato's doctrine, similarly holds that "science is knowledge of universal principles," that "knowledge and understanding are properties of science rather than of experience, and that "it is impossible to acquire knowledge through demonstration if we have no knowledge of primary principles immediately known."

Through the middle ages philosophy—the word science is hardly applicable here—had little touch with any problem of values at first hand. Philosophy, even in a freer age the critic of values traditionally established through custom rather than the creator of fresh values, was in this period assigned the task of justifying and fortifying the values set up by the church, and he was bold indeed who essayed to supplement or to criticise the material provided him. The spirit of the Renaissance to a considerable extent liberated the philosopher from this servile position, and there arose such men as Leibniz and Spinoza to work out, each in a single comprehensive system, their theories of value and existential reality. Nowhere in the works of the rationalists of the early modern period do we find any clear division of subject matter or demarcation of method as between theories of existence and principles of value.

The break comes only when science, pulling free from the leading strings of "pure reason" steps out boldly upon a platform of experience as furnishing the sole and sufficient data for her investigation of the existential world. Nor did the early research of physical scientists, whose chief interest lay in the definitely circumscribed problems they had set themselves to solve, whose acceptance of the empirical point of view was a matter-of-fact limitation of a particular field of investigation by the adoption of particular working assumptions, occasion any great immediate apprehension in philosophic circles. But when the British empiricists, led by Locke and bringing their disturbing doctrines to a climax in Hume, showed their world the logical implications of sensational empiricism taken as a philosophical tenet rather than as a mere working hypothesis, Kant, "aroused from his dogmatic slumbers," looked about him for a way to save the "eternal verities" from the general wreckage.

To the phenomenal world he gave a certain stability by setting up the forms of Space and Time *a priori*, as necessarily conditioning the experiential matter of sense data, otherwise determinable only *a posteriori*. But such solidity and predictability as thus attached to the world of experience was obviously subjective, yielding no certain universal—no absolute ; it was still a world of phenomena, and in view of the annihilation of innate ideas it was the only world accessible to human knowledge. If there are any universals—any things-in-themselves—they must be otherwise apprehended, and Kant finds a way of approach through man's moral nature and the dictates of conscience. In the categorical imperative of duty that is laid upon human kind is to be found the guarantee of such realities—such things-in-themselves—as must be postulated if that imperative is to have any reasonable signification, notably the principles of Freedom, Immortality, a Moral Universe and God. It follows that the whole scheme of values is a matter of faith, not of demonstration ; in the very nature of things it is as incapable of verification by empirical methods as of construction by those methods to begin with. Science

can neither formulate, criticise nor ratify values. Its very touch is contaminating. Conduct, even in strict accord with the dictates of duty, if it be motivated or in any way influenced by empirically warranted anticipation of results, thereby loses its ethical import. In the interests of true moral ideals, then, science is warned against trespassing in the field of values.

Nor did Kant stand alone in thus attempting to preserve values from experimental examination. Even before Kant's time the British moralist, Cudworth, in a "Treatise concerning Eternal and Immutable Morality" had opposed to the empirical ethics of Hobbes a lengthy and ponderous defence of the absoluteness and finality of ethical ideas and the immediacy of their apprehension. The word science appears frequently, and scientific and scientifically are invariably used as terms of approbation, but it is science in the Aristotelian sense to which Cudworth has reference—in fact the whole essay is concerned with the reason of subsumption, and abounds in the vocabulary and the uncriticised assumptions of scholasticism. The treatise is not so much an essay at refuting the claims of modern science to the right to pass judgment on values, as it is a mere reiteration of the old attitude. Unlike Kant, Cudworth considers that the reason, which is "an active exertion of the mind from within itself," can immediately and perfectly know the ultimate truths of "morality, ethics, politics and laws," but in this capacity reason is completely dissociated from the activity of the senses, "the cogitations of the passive part of the soul"; for, he declares, "if the mind looked abroad for its objects wholly without itself, then all its knowledge would be nothing but sense and passion. For to know a thing is nothing else but to comprehend it by some inward ideas that are domestic to the mind and actively exerted from it. Wherefore these intelligible ideas or essences of things, these forms by which we understand all things, exist nowhere but in the mind itself."

The pages of this treatise of Cudworth's, crowded as they are with references to a host of Greek philosophers, the obscure as well as the illustrious, and interlarded with quotations in the Greek from Plato and Aristotle in substantiation of each successive argument, seem to belong to a dead and buried era, but echoes of the same contention, more modernly phrased, it is true, and appealing rather to moral sentiment than to the authority of the ancients, are not infrequent even in the century just gone. The following passage from a work on "Metaphysics and Science" by President Bowen of Harvard (published in 1885) affords a good example: ". . . . there is an element of our nature which excels prudence more than prudence excels animal instinct or passion. . . . By the side of prudence, or above it, it introduces the novel conception of duty or moral obligation; over personal happiness as an object of effort and a guide to action it places the idea of absolute right. Putting aside the consideration of external things it erects its throne in the soul of man, and judges not the outward acts but the motives and intentions which lead to it and constitute its moral character. Dealing thus exclusively with conceptions of the intellect or pure ideas, all contingency or uncertainty disappears from its decisions, and the sentence which it pronounces is as unchangeable as the purposes of the Almighty." In view of this

pronouncement, one is not surprised at the condemnation of empirical ethics which follows: "The extraordinary success of physical inquiry after Bacon's time tended naturally to the depression and somewhat to the injury or corruption of abstract science. The undue extension of the inductive method to the region of pure ideas produced the ethical system of Hobbes, himself a friend and disciple of the great master, but whose philosophy is now a byword from its degrading principles and its tendencies to selfishness in morals, to materialism in philosophy and to despotism in politics."

The most vehement protest against the application of scientific methods to the investigation of values has ever been voiced in the name of religion. The leaders of the church, Catholic and Protestant alike, have in times past fought almost every inch of the ground that science has taken over since the appearance of Galileo's revolutionary theories concerning the relation of our planet to the solar system. In physics and in geology, in anatomy, physiology and medicine the discoveries of careful and thorough experimenters have been countered by the authority of the ecclesiastical hierarchy, the church fathers and the canon, and ever and again the world has come to accept for fact so trite as to be wearisome in repetition what to the world of a generation or two before had seemed the wildest, and to many the most profane, theorizing, and ever and again the defenders of the faith have come to swallow without blinking what their fathers had regarded with pious horror as the rankest heresy. Almost within the memory of the older generation of the present time, inoculation, vaccination and the use of anaesthetics have been regarded as an unwarranted and impious interference with the inscrutable ways of Providence, and long after their practical effectiveness had conclusively been demonstrated the legitimacy of employing such expedients was seriously questioned. What wonder, then, if the incursion of experimental science into the yet more sacred realm of morality was viewed with no small measure of suspicion and alarm?

In general the religious attack has been led from an angle entirely different from that of Kant, and equally divergent from that which is indicated in Cudworth's "Treatise." It is not the sanctity of moral ideals in their own right that has oftenest led theologians to repel the advances of science, but rather jealousy for the authority of direct revelation in the establishing of moral imperatives which in the last analysis appear to be exoteric in their validity. Reduced to its simplest terms the argument seems often to run very much like this:—The right is what God commands *because* He commands it; human experience cannot initiate one into the mystery of the purposes of God, although human intuition, or conscience, may become the medium of revelation, always, be it understood, in exact correspondence with such recorded inspiration as may be recognized as authoritative by the person presenting the argument. It follows that any attempt of science to institute moral discriminations is regarded as both futile and dangerously misleading.

There is no arguing about such a statement of the case, because there is no common ground, no mutually acceptable postulate upon which the argument for an ethical theory rooted in science may be based. The only answer open to science

is the practical answer it has so often in the past given to the objections of a rigidly opinionated orthodoxy—the compelling answer of a demonstrated usableness and usefulness amounting eventually to indispensability. No formal arguments presented by the champions of science served to avert the harsh intolerance that the introduction of more humane methods into the practice of medicine and surgery met at the outset, but today it would be hard to find even among the most orthodox one who would be willing to go back to the old ways. Theoretical reconciliation and acceptance follow, not initiate, the practical adoption of radical innovations.

Another apparently sincere but undiscriminating line of argument confuses the application to ethical problems of the methods of natural science with a subsumption of the subject matter of ethics under the rubrics of natural science, as though ethics were to be made merely a minor division of physics or biology. It is such a confusing of the issue which underlies protests like the following: "The theoretical foundation (of ethics) is equally illusory whether it is sought in 'science' or in 'metaphysics' . . . . On the side of science . . . . the fallacy of seeking the way to certain results while leaving unproved the implication that those results are desirable. By no knowledge of the laws of society can the sociologist prove that civilization is preferable to barbarism. By no knowledge of the laws of life can the biologist prove that life is worth living." In answer to such misconceptions Huxley remarks: "Obviously it is one thing to say that the logical methods of physical science are of universal applicability, and quite another to affirm that all objects of thought lie within the province of physical science."

The blame for this misapprehension rests, however, not solely at the door of the critics, for where natural scientists have tried to carry over their investigations into the field of ethics they have almost invariably brought with them not only the methods but also the categories of physics or biology or whatever other particular science had especially occupied them, unable or unwilling to recognize in this new field altogether new data and new principles—trying to force this new material of value into the old molds of naturalistic interpretation.[1]

Instances of the objections raised against degrading ethics by contact with science might be multiplied indefinitely, but perhaps enough examples have been cited to indicate the general trend of the chief of these. The four lines of objection indicated above are, I believe, typical, viz. the Kantian, the scholastic, the theological or ecclesiastical and that which has arisen from time to time in misapprehension of the issue. The last two, which have already been very briefly estimated and criticised, hardly call for further notice. The first two may well be given rather more careful consideration.

[1] Cf. Lord's criticism in an essay on "An attempt of Hobbes to base Ethics On Psychology", wherein he considers "First the failure of Hobbes, the mechanical philosopher, to make the transition from moving matter to sensation without setting up the crudest epiphenomenalism; secondly his failure to make plain the transition from sensation to the superior form of reasoning exhibited in his ethical thinking; thirdly, his virtual elimination of any effective intelligence in his radical theory of will as nothing other than mechanical action."

With regard to the metaphysical point of view represented, Kant's system and Cudworth's are, of course, widely separated. Possibly their practical implications for ethics are not so widely divergent. Cudworth declared ultimate truths to be rationally discerned, and that in all their completeness, while to Kant these same truths were postulates necessitated by the demand of the moral law, the appeal of which is not to "pure reason" but to the will or "practical reason." In either case, however, we are confronted with moral principles from the formulation of which the influence of experience is strictly excluded. No very careful scrutiny is necessary to show that such principles resolve themselves into empty forms, principles of consistency which, so long as they remain consistent, can make no revelation concerning the *matter* of morality. Neither the dicta of pure, unbiased intuition nor the categorical imperative which carries with it its own credentials in the inescapable authority which it wields over the human will can be brought into real contact with human life except by the surreptitious introduction of empirical qualifications. The price paid for principles that shall be final, absolute and immediately apprehended is the sacrifice of content.

As for Kant, it is true that he makes a show of reclaiming the "will that wills nothing" from its barrenness by adding his maxims regarding the "kingdom of ends," but in so far as he thus makes the imperative practically suggestive and meaningful he makes it the product of empirical considerations. We are told explicitly that "there remains nothing but the universal conformity of its actions to law in general, which alone is to serve will as a principle, that is I am never to act otherwise than so that I could also will that my maxim should become a universal law." If we take Kant at his word we ought to be able, with his sanction, to classify as moral any social principle that is self-consistent, but there is no internal inconsistency in the "law of the stronger." It has been more than once pointed out that the only proviso in my bill of right to exercise my power to the fullest extent in the satisfaction of selfish desires is that I must not whimper if a stronger than I oppress me in turn. The self-consistency of the nihilist whose actions are founded upon a thorough going philosophic pessimism is unimpeachable. Yet both these courses of action fail signally to fit into the "kingdom of ends."

If we turn to Cudworth's "intuitive" moral principles we find a situation no less anomalous. The hands may be the hands of Esau, but the voice is that of Jacob. One cannot help wondering what form Cudworth's moral precepts would have taken had the environment and traditions supplied him been generated by some remote community upon a cannibal island. In short the repudiation of experience as a moral guide practically amounts, in all such systems, to substituting for the live growing experience of the present generation the crystalized experience of generations gone. Such a substitution, if it has its element of strength in conserving the accumulated wisdom of succeeding generations, has also an unquestionable element of weakness in its lack of adaptibility to changing needs, for only as tradition loses in the dim remoteness of antiquity the evidence of its experimental origin can it successfully be palmed off as the product of bare unaided intuition. Such principles as are thus derivable are, moreover, as pitifully attenuated

as they are rigidly unbending. Taken concretely they must be evaded by countless subterfuges of casuistry ; taken abstractly, as a mere outline of the general plan of moral conduct, they are so extremely sketchy that the necessary ministrations of experience in furnishing colour, filling in gaps and rounding off the whole practically make the picture, completing it, be it remarked, in a way utterly unpredictable by intuition. It is this unacknowledged use of experience which has so long fostered the delusion that reason or conscience can proceed, quite independent of experience, to construct and assign moral values. If the pretence could once be laid aside, and the necessity of an appeal sooner or later to experience be made apparent, there might be less condemnation of those who avowedly seek to establish ethics as an experimental science.

In the separation of science from the study of values the moralists have not, however, been the sole aggressors. Doubtless the antipathy began on their side, but in recent times there has been a manifest tendency on the part of many scientists and philosophers to account the recognition of values an unscientific, not to say an undignified, thing. Values, if not a positive handicap in the stern pursuit of facts, are at best a useless luxury, falling quite outside the aims and interests of science.[1] The rise of behaviouristic psychology would seem to constitute one expression of this attitude, and similar indications are observable in other fields.

Asked to submit reasons for his aversion to mixing science and values, the scientist has at least three charges to bring against the latter : The philosophy of values is prejudiced, sentimental rather than analytic, and, in contrast to the characteristic objectivity of the former, hopelessly subjective. The first two charges are implied in the following quotation, which, though not from the pen of a scientist, seems fairly to represent the scientific attitude : "The ideal man of science should care only for the correctness of his observations, the consistency of his inferences and the formal truthfulness of his calculations and deductions. No higher interest in maintaining a preconceived notion, in serving a practical end or in supporting a pet theory should be allowed to interfere with the even and passionless tenor of the scientific judgement." [2] The same author explicitly charges philosophy —the philosophy of values, I take it—with an individualism and subjectivity that forbid the employment of scientific methods in the examination of its data. "The process of isolation and abstraction, so fruitful in scientific research and in the acquisition of natural knowledge, is inapplicable to the phenomena of the inner life."

Finally, in the name of philosophy, Bertrand Russell and others have recommended that science and values be recognized as belonging to wholly

[1] Interesting in this connection is a comment in a very recent number of the *Philosophical Review* (in an article "The Intelligible World" by W. M. Urban of Dartmouth) : "The object of ancient science," says Levy-Bruhl, "was to understand. Modern science limits its ambition to knowing." Nowhere is the sophistication of modern thought so completely shown as in this paradox of science : that it wishes to know, but not to understand . . . . If science proclaim itself wert-freies Denken, philosophy will become the interpretation of meanings and values."

[2] Merz.

different spheres, and that to insure its greater fruitfulness and more rapid progress, philosophy should henceforth be identified with the interests of the former. "It is my belief", says Russell, "that the ethical and religious motives, in spite of the splendidly imaginative systems to which they have given rise; have been, on the whole, a hindrance to the progress of philosophy and ought now to be consciously thrust aside by those who wish to discover philosophical truth . . . . it is, I maintain, from science rather than from ethics and religion that philosophy should draw its inspiration." And again, "The scientific philosophy, therefore, which aims only at understanding the world, and not directly at the improvement of human life, cannot take account of ethical notions without being turned aside from that submission to fact which is the essence of the scientific temper."

Again and again in following up this contention of scientists and "scientific" philosophers we are confronted with the sharply drawn antithesis between fact and value—facts the beginning, as data, and the end, as conclusion, of scientific research, value the subject matter and the aim of intuitive discernment, dogmatic controversy or sentimentalising reflection ; facts the dominating reality in the world recognised by science, value a sort of inconsequential epiphenomenon, so far as that world is concerned. But this is to make of science as unreal an abstraction as the corresponding antithesis drawn by moralists has made of ethical insight. If we turn back to the ordinary situations of every day life out of which both science and ethics have sprung, we find there no such opposition between fact and value. Rather we find that just as ethical valuation is occasioned and determined by those very facts of experience which the moralists have disdained, even so scientific research has originated and taken its direction under the inspiration and regulative influence of the values which the scientists affect to despise.

It is not within the purpose or scope of the present paper to show in detail how scientific methods are to be applied to the solution of the various problems of values. To do so would launch one at once upon the undertaking of actually developing a science of values of one sort or another. As to the more general preparatory work of demonstrating the adaptibility of ethical data to scientific treatment, this has been thoroughly outlined by Dewey in his "Logical Conditions of a Scientific Treatment of Morality".

In conclusion it remains only to emphasise what has already been suggested, viz., that for the philosophic world in general the "transition . . . . to a scientific attitude of mind", the "ceasing to take certain things for granted and assuming a critical or inquiring and testing attitude" in regard to questions of value is being brought about, and is to be brought about, not so much by arguing about its possibility, legitimacy and advisability as by the very *fact* of the application of scientific methods to one after another of the practical problems of values confronting the present generation. One cannot take the hastiest survey of recent literature upon the problems arising in economics, sociology and ethics without realising that it is being done to a remarkable extent—that apparently without ever stopping to wonder whether the vital problems confronting humanity may or can be scientifically attacked, those attempting to deal with these problems actually are so attacking

them. The success or failure of such attempts will, in all probability, largely determine the attitude of the future regarding the relation of science and values.

Granted that there can and should be such a thing as a science of values, there yet remains much debatable ground. Doubtless the most turning question is: What shall be taken as constituting acceptable data for such a science? It would seem that the only intelligible disagreement between thoughtful present day representatives of the old ethical schools of intuitionism and empiricism must turn about the answer to this question, and not about the absurdly out of date one as to whether or not morals can be studied from a scientific point of view—with a scientific attitude of mind. The fact remains that the most scrupulously conscientious scientist goes back to something which he cannot prove, some assumption of the acceptability and validity of a certain type of data for his purpose, some presumption that those data are capable of taking on meaning through arrangement into a coherent whole, through the relation of each to some central principle. Ultimately, data in any department of science are matters of acceptance, not of proof. Just so a science of ethics must rest ultimately upon data that are not strictly demonstrable, and the intuitionist, even though he be in a measure converted, will continue to show his own distinctive attitude of mind by accepting, as valid data, facts or experiences of a type which the empiricist would rule out of court. Is there is human experience a sense of "ought" which no introspection or observation enables him to analyse into more primitive components or subordinate under a more readily comprehensible category? If so the spirit of science itself demands that he recognise it not merely as an aspect of a problematic situation demanding a solution but as a very part of that collection of data through which the solution of the various problems cf moral values must be reached.

Ironically enough, in the light of the history of such thought, the modern champion of intuition is repeatedly driven back upon the pragmatic test for the justification of his position, while the empiricist has been known to parry with an appeal to some abstract "Truth"—a strange turning of the tables, surely, though by no means an unprecedented one. Obviously the solution of the problem as to the relation of science and values no longer has place as a plank in the party platform of any particular philosophic system.

The Religious Forces That Influenced Vemana.

By T. Rajagopala Rao, B.A., L.T.

Sankara was the founder of the Advaitic school of philosophy in India and the next great name in the history of philosophy was that of Vidyaranya. Vidyaranya was supposed to be one of the founders of the famous kingdom of Vijayanagar on the Tungabhadra. We know the intimate relationship between that kingdom and that of the Reddi kingdom of Kondavidu, and one of these Reddi chiefs was a commander of the forces of Vijayanagar, who led them successfully in many battles. Vijayanagar was then the most powerful of the Hindu kingdoms in the South, and it was there that the revival of Advaitism began about the thirteenth century. The story goes that Sayana and Madhava were two brothers, who helped Bukkaraya to found a kingdom at Vijayanagar and that it was Madhava who made Bukka, a king himself actually ruling over it as his prime minister. That was, the age of the revival of letters in the Telugu country and the dynasty at Vijayanagar influenced literature more than any other to produce that effect. Two periods can be noticed in this history, one earlier belonging to the time of Madhava and Bukka, and the other to the time of Krishna Raya. The one was the age when Sanskrit religious literature was improved, and the other when Telugu took a new line and under royal patronage produced poetry that became a model even to the present day. It is however with the earlier period—the period of Sanskrit religious literature—that we are here concerned. *Parasara Smriti* is the most authoritative code of law for the *Kali* age, *i.e.*, the present age and Madhava wrote a commentary on it to explain all the intricate points therein. His commentary—*Parasara Madhaviyam*—goes by his name, and is the most authoritative commentary in interpreting the laws of Parasara. *Kalamadhaviyam* is another of his Sanskrit works on the computations of time. Madhava was a great Advaiti (follower of Sankara's school) and began the work of popularising his philosophy by producing a biography of Sankara, the famous *Sankara Vijayam*. The world-famous *Sarvadarsana Sangraha*, that points out the logical errors in the existing philosophies of India, and establishes Advaita is another of his greatest productions. The commentary to the Vedas, known as *Vidyaranya Bhashyam*, and the commentary on one hundred and eight Upanishads are also due to him. He succeeded to the mutt of Sankara at Sringeri, and it was in his time, that by his culture, by the facilities he enjoyed from the most powerful of Hindu kingdoms in India, and by the literature he had spread broadcast, that Advaitism became popular throughout India, and especially in the Telugu country. It is not necessary to enter here into the controversy as to whether Madhava, Sayana, and Vidyaranya were all names for a single man, or

each different, as they were, in any case, contemporaries who helped to popularise Advaitism. It has already been pointed out [1] how the dynasty to which Vemana belonged helped literature even as Vijayanagar did, and how many Sanskrit and Telugu works were produced by the chiefs and poets of Kondavidu. Vemana's was thus the age, when with the powerful support of the mightiest of the Hindu kingdoms in the South, and under the guidance of its *actual* ruler (for Madhava was all in all there) himself, the high priest of Advaitism, Sankara's philosophy achieved its greatest successes.

The second great influence that helped the spread of Sankara's philosophy in the Telugu country is to be seen in the translation of the Mahabharata. Mahabharata is not in itself a book on Advaita Philosophy. Its chief translator into Telugu, Tikkana Sōmayaji, however harped on the Advaitic principles so often, in time and out of time, throughout his translation, with a force of expression and dignity of style, for which to this day he stands unrivalled among the Telugu poets, that the work of religious propagation was complete during his time. Tikkana translated the last fifteen *parvas* (out of a total of eighteen) of the Mahabharata. His was a genius of no ordinary type, and his *Sānti* and *Anuśāsanika parvas* (chapters of that great book) are edited to-day with commentary after commentary, expounding the essence of Sankara's philosophy as presented by this immortal poet. To extirpate other religions out of the country and establish that of Sankara was the greatest purpose for which Tikkana lived and died. Born in the lineage of the rulers of Guntur, and equipped with a profound knowledge of all the religious and secular lore of his time, including polity, Tikkana soon endeared himself to King Manuma Siddhi of Nellore and became his prime minister and the commander-in-chief of his forces. In wealth and power Tikkana thus attained to a position, second only to Madhava, and like him, he was invincible in the tactics of philosophical argument. Gaining the friendship of the great King Pratapa Rudra, of the dynasty of Kakatiyas at Worrungal, it was this great poet Tikkana, who extirpated Buddhism and Jainism from that king's territory, and in its neighbourhood. His Telugu Mahabharata is a glorious example of literature as a power, and did for Advaitism, what with argument and sword he did for it in the land of the Kakatiyas. Tikkana was thus loved and admired throughout the country and his Mahabharata became the greatest of works in the Telugu language. The popularity of Tikkana's work served to popularise his philosophy in the land.

From the fact that Vaishnavism had not such powerful support in the Telugu country, it thus chanced that Advaitism became the current philosophy throughout Andhra, and Vemana as a man of the times, had intimate and direct connections with the influential currents of thought. Kondavidu was as strong and powerful centre for learning as Vijianagram in influencing Vemana.

Moral Literature.

Literature of the type that Vemana had produced is not new to India. Leaving alone the *Sutra* literature of Sanskrit, that expounded philosophical

[1] This Magazine, April 1924, pp. 108 ff.

thought in short aphorisms, as in the *Sankhya*, *Vaiseshika*, *Vedanta* and other sutras, we may note that even at a later date poets like Bhatrihari, and Panditharaya produced in their name great works bearing on the ideals of human life. At the time of Vemana, the two Sanskrit authors named above were popular in the learned circles in the Telugu country. Bhartrihari's *Subhashita Ratnavali* enjoys even to-day great popularity throughout India. It is divided into three parts,—morals, erotics, and asceticism. Each part contains a hundred slokas, divided into ten chapters of ten stanzas each, treating of subjects like education, wealth, etc. Another class of popular literature in Telugu is the *Sataka* literature. A poem of this class if called a *Satakam*. Each *Satakam* contains a hundred stanzas, which are either devotional or purely moral collections of Vemana's stanzas and go by the name of Vemana Satakam, though they number more than a hundred. *Sata* in Sanskrit is the same as *centum* in Latin and means a hundred. A *Satakam* is thus a string of a hundred stanzas and Vemana Satakam, to conform to the title that it bears as a Satakam, must contain only one hundred stranzas. As a matter of fact, the Satakas are the most widely known literature in the Telugu country, and there are more people among the literate who use these Satakas, than those who use the other kinds of poetical literature in Telugu. The Satakas in Telugu whenever written, whether before or after the time of Vemana, each contain a hundred stanzas, but the biggest collection of the stanzas of Vemana Satakam now contains three thousand stanzas. It is therefore curious to see how Vemana's work is popularly known as a Satakam. Probably the author originally meant to give but a hundred stanzas, but this limit was exceeded as occasions to speak in stanzas increased. It is quite true that many of the stanzas now found in Vemana's collections are spurious. Still, it goes without saying that Vemana wrote more than a hundred stanzas, and the name Satakam to it, whatever be its origin, is therefore a misnomer. One thing however is true, viz., that the kind of literature that Vemana gave was not an innovation to the language and that it existed both in Telugu and in Sanskrit long before his time.

Nor is this all. Vemana seems to have travelled widely throughout Southern India as references in his stanzas to the Cauvery and Srirangam clearly show. It is a well-known fact that Tamil had a very ancient literature of this type as in *Tirukkural*, *Naladiyar*, and other famous works. Tirukkural, is for instance regarded by the Tamils as a Veda, not less in sanctity than the Sanskrit Vedas themselves, and we find in Vemana's stanzas exact translations of Tamil pieces of poetry.

One or two examples will suffice. Let us take the following :

1. Tamil stanza.

Karpūram pōla kaḍal *uppu* irundālum
Karpūram āmo kadal uppu
Porpū : ram puṇṇiyarai pola irunthālum
Pulliyarṭham *puṇṇiyar* āvarō puhal.

Vemana's stanza.

Uppu kappurambun okka *pōlikan* unḍu
Cūda cūda rucula jāda vēru
Purushulamdu *puṇya purushulu* vērayā

Substance of these stanzas.

Camphor and salt resemble each other, though they are really different. So among men, the good are different from the bad.

2. Tamil stanza.

Cittr unarvōr enrum cilu ciluppar nanramainda
Muttr unarvōr enrum mozhiarē vettr perum
Vengalathtosai migumē viri pasumbon
Oṇgalattil undō oli.

Vemana's stanza.

Alpudepudu palukun āḍambaramu gānu
Sajjanundu paluku challagānu.
Kamchu mrōginatlu kanakambu mrōgunā ?

Substance of these stanzas.

Men of little knowledge make much noise, but the really learned speak very little. Does gold make the same noise that the bell metal does ?

We thus see that the existence of this kind of literature in Sanskrit, Telugu, and Tamil influenced Vemana to speak his stanzas, and that he had freely borrowed from the existing sources wherever he could do so. The following is an example of a translation of a text from the Upanishads.

The Svetasvatara Upanishad I, 13.

Tilēshu tailam dadhiniya sarpiṭ
Āpassrōtūm ssvaraṇishu chāgnih

English Translation.

As oil in sesame seed, ghee in curds, water in a rapid stream, fire in sticks that kindle by attrition, so is the Absolute perceived within one's self.

Vemana's stanza.

Mariyu dadhini ghritamu mrākulam danalamu
Saumya sumamulamdu saurabhambu
Tilala tailam atlu tejarillu cidātma

Translation.

The Omniscient soul pervades like ghee in curds, fire in wood, fragrance in soft flowers, and oil in sesame.

A Few Stanzas of Vemana.

We have thus seen how Vemana was a Saivite of the School of Śankara, and how he came to write as he did. I give below a few renderings into English of some of his stanzas, not already translated by Mr. C. P. Brown :—

Blessed are the pure in heart, for they alone can have undisturbed peace. Of what use is profound learning, if such learning helps a man only to be more selfish and cunning?

Think deeply before you act, and consult the wise in all cases of doubt. A black spot however carefully hidden is sure to be discovered one day.

Purity of motive is the power behind all noble deeds. Where the motive is not pure, your actions lead you into inconvenient situations.

The glorious name of Śibi, who gave his own flesh to save a pigeon became proverbial, because actions that cannot be suppressed from memory can never be forgotten. The good are always remembered, not the evil-doers.

The margossa tree *(Azadirachta Indica)* does not loose its bitterness, and become sweet, though it is watered with milk for a thousand years. Such are the wicked, who can never mend their evil ways.

The worm on the leaf spoils the plant, and the fungus at the root kills the tree. Association with the wicked brings evil unto the good.

The man who truly lives is the man who makes the troubles of others his own. Whoever, in such service, sees the essence of man's existence is the greatest of social workers.

'An attempt which should succeed if done when circumstances are ripe for it, fails, if prematurely hurried through. The fruit of the *Bryonda Callosa*, which is sweet when fully ripe tastes bitter if it be eaten raw.

The fool looses his time, and puts off all good and noble work saying " I will do it to-morrow." Who knows what may befall him before the morrow?

The ship that plies softly on water cannot move an inch on land. Strength of position does not avail a man, when he is out of it.

The good Brahmins fix an auspicious moment, and invoking the blessings of the elders, celebrate the marriage. Soon the bride becomes a widow. How then are auspicious moments true?

The jasmine plant does not bear flowers, unless it be regularly watered. Food can never be ready unless it be cooked. Without pains, there are no gains.

The jackal leaves the flesh in its mouth to catch the fish in the water. The fish escapes, while a kite flies away with the flesh.

A virtuous man, though poor, is worth a crore, while a wealthy man, without good qualities is hardly worth a broken cowrie. Wealth is not the test of goodness.

The little that is done to a virtuous man, grows by his goodness to the size of a mountain. Do however much you may to a wicked man, not even a trace of it is remembered by him.

The wicked man can never become good by mere learning, however great. An ass is an ass even if it carries loads of fragrant drugs.

.The world cannot allure the man who, in rigid response to the commands of the self within, restrains his desires and does not yield to temptations. Verily such a man is the sage among men and attains perfection.

He sees the universe through the sense of sight, and he sees himself in a mirror. Thus through visual the wise man can comprehend the nature of the real.

A slight push may cause a slight motion and take an object to the required point, while a proper push does not. Action is proportioned to the strength of the motive.

By continuous rubbing two stones becomes smooth and rounded. It is by constant application that action becomes perfect.

Oil is pressed from the gingelly into a pot, by the work of the bullocks that turn the mill. On that analogy, man can produce ambrosia out of himself, by making his body the pot, his qualities the bullocks, and his purposes the gingelly seed.

You can cut a thing with the sword, but not with its handle. It is intelligence, not brute strength, that avails a man.

It is water that becomes salt ; it is salt again that becomes water. Know this to be the nature of relationship between Siva and the soul.

Why do you bring hard stones, build temples with them, and serve these stones ? What do you gain by serving the stone ?

When there is the Lord of the Universe to guide the world, why should the Brahmins labour themselves for it ? Does the monkey in the forest guide the world ?

A pariah is not a pariah, but he who breaks his word. He is a greater pariah, who calls another so.

Orpheus and Eurydice.

A Verse Translation of Virgil: Georgics Bk. 4, (Lines 452 ff.)

By the Rev. W. L. Campbell, B.A.

In wrath he oped his lips with words of fate ;—
" For sure some wrath divine shall thee pursue ;
Great are the sins thou wouldest expiate.
This is the punishment for thee would rouse
The hapless Orpheus—not as you deserve—
Did not the fates oppose. And theft of spouse
Doth make him bitterly to rage. As she,
Forsooth so but she might escape from thee
In headlong flight, beside the streams saw not
Before her feet—Ah, maiden doomed to die—
The hydra vast that in the grasses high
Doth ever guard the banks. And then her band
Of comrade Drayades the mountain heights
Did fill with shouts of sorrow wild ; with them
The citadels of Rhodopæan lands
Did weep, and tall Pangæa, Hebrus too
And Actias, home of Orithya.
On hollow lyre of tortoise shell he played,
Consoling his sick love, he sang of thee,
Of thee, sweet spouse, on desert shore alone,
Of thee, when day would come and day would go.
And e'en the jaws of Tænarus, the deep
Entrance to Hell, he enters, and the grove
Gloomy and ever dark with dreadful fear
And to the Manes comes, and their dread king,
And hearts that know not to pity prayers
Of mortals. At his singing moved, the shades
And unsubstantial wraiths of those that lack
The light from deepest seats of Hell do come,
As many thousand thousands as the birds
That settle 'mong the leaves, which from the hills
The eventide or winter rain doth drive :—
Both matrons husbands, heroes great in heart
Whose life was now performed, and boys and girls

Unwed, and youths that on their pyres were placed
Before their parents' eyes, whom all around
Black mud and ugly reed of Tartarus
And hateful marsh with waters slow doth bind,
And with its nine times circling stream the Styx
Doth hem them in. Nay, there the very halls
Were mazed, and lowest Tartarus, and e'en
Th' Eumenides with dark blue snakes entwined
Within their glossy locks, and Cerburus,
The dog, did hold three mouths agape ; the wheel
Of Ixion too stood still for want of wind.
And back returning, he perchance had 'scaped
All ills, and Eurydice now restored
Was coming soon e'en to the upper air,
Close following behind (for the Queen of Hell
Laid down this one condition—that the wife
Should go behind, nor Orpheus look at her
While still in Hell), when sudden madness came
Upon the heedless lover, madness which
Deserved a pardon, if but Manes knew
How to pardon. He stood still, alas,
Forgetful, yielding in his purpose, back
He looked on Eurydice, now his own
Beneath the light itself. There spent was all
His toil, and broken was the league which Hell's
Unbending tyrant made, and thrice was heard
A roar upon the lake of Hell. Then she :—
" What frenzy, Orpheus, what hath ruined thee
And me, e'en me whom cruel fate calls back ?
And sleep doth close my swimming eyes. Farewell.
In night's surrounding fold borne off, I go.
Vainly I stretch my feeble hands to thee,
To thee, mine own, but I no longer thine."
She spake, and from his eyes sudden, as like
The slender smoke doth mingle with the air,
She fled apart from him, nor after saw
She him, as, vainly clutching shades, he wished
To tell her many things. No more to him would
He who keeps the doors of Hell permit
Free pass across the marsh that lay between
His goal and him. What must he do, where turn
When once again his spouse is carried off ?
What tears with voice uplifted must he use

To move the Manes, and what aid divine ?
She indeed is cold in death, as now
She sits in Stygian barque. But he, they say,
For seven whole months, for seven long months did weep
Beside the lofty rock, and there he gave
His tale beneath the cooling stars ; 't is said
The tigers soothed and moved the oaks with song,
Just as the nightingale that 'neath the shade
Of poplars mourns and sorrows for the brood
That's lost, which, when the hardy ploughman saw
Unfeathered in the nest, he tore aside.
But she doth weep the whole night through,
And sits upon a branch, and mournful dirge
Again and yet again she sings, and fills
The places near and far with doleful wails.
No love afresh, no other marriage song
Hath power to bend his mind, but all alone
He would traverse the northern realms of ice
And snowy Tanais and lands and fields
That never widowed are from Riphaean frosts,
Complaining sore of Eurydice's loss
And the gifts of Pluto, unavailing. Spurned
And slighted by such tribute which he showed
Unto his wife, the Thracian matrons, mad
Amid the sacred rites of Bacchus, loving night,
Asunder tore the youth, and far and wide
O'er fields they threw him. Then might Hebrus, too,
The river of his sire Oeagrius,
In midmost eddies bearing high his head,
Marble-chisselled, clear and white, from neck
And shoulders shorn broad off, whirl round and round.
Aloud it cried : " Ah, Eurydice mine "—
Mere empty words, alas, and deathcold tongue.
" Ah, wretched Eurydice," once again
With soul all-fleeting. " Eurydice," banks
And streams gave back re-echoing."

Vocational Education in India.

By J. P. Trumble, F.N.B.A.

Formerly Advisor to the Government of Madras on Technical Education.

Unbalanced budgets are reported from all parts of India, and cries for retrenchment go up from the people who do not, or will not, see any other way of solving the problem. This country, fertile and productive, with raw material and labour in abundance, staggers along in the wake of the world, striving to copy the methods that have left other countries in the lurch. Europe suffers from the want of natural supplies of raw material, the Colonial Dominions suffer from a lack of labour to handle their raw materials, India possesses both material and labour, but is suffering from a lack of ideas and education. Ideas can be borrowed, and education can be bought, (at a price) and India has bought and paid for too much of the wrong sort, and she is just waking up to the fact.

The educated classes, when they get clerical work, which is the only sort of work they are fitted for, are poorly paid, and the competition for work of this kind is becoming intolerable. The thoughtful leaders of the country realise that the present system of education will not supply the future need of the country, or provide the training or knowledge required to utilise the enormous resources of material and labour that are available, and are turning to Vocational Education as the remedy. Vocational Education is not a change of educational policy, but an addition to, or an extension of it. It does not mean that there is to be less general education, but more general education applied to productive work. It is an economy of brain power to direct that power to some useful purpose, and Vocational Education is intended to do this. The best brains of the people are to be used for the production of wealth, and no longer allowed to degenerate in idleness, because there is nothing for them to do. Vocational Education will show them what to do, and how to do it.

There are people who are opposed to this type of training, but they are not numerous, and as is usual, their opposition is the result of a narrow and conservative mentality, often combined with a total ignorance of the meaning, political, social and economic, of this kind of progress to the mass of the Indian people. To these opponents it means every man a workman, and of course these highbrows have the greatest contempt for workmen. They have no respect for the man who makes things, never having made anything themselves except mistakes. These people are by no means inarticulate, but, their arguments are either vapid nonsense or venomous claptrap. The writer has actually met men of education who are proud of their ignorance of technical matters, in the same way and for much the same reason as a Chinese gentleman is proud of his long finger nails. This type of individual never considers what he owes to the men who work with hand and brain

to provide his food and clothing, his books, pens and paper—the roof that covers him, or the car that carries him about. He does not realise that the best brains of the world have been used to produce the things he looks upon as necessities, but, regards them as the products of mere labour, and so beneath his notice. He can tell you how many beans make five, but, how to make those five beans into five hundred he will refer you to his gardener. How little they know, these learned gentlemen!

There is another more cautious kind of opponent who says the country cannot afford this change, and this deserves more consideration. The first question is, "Can the country afford to go on as it is going?" And the answer to this is "No." If we continue turning out more and more educated boys for whom there is no work, what is to become of them? They will starve, and the starvation of the best young men in the land is not conducive to political steadiness, or to the maintenance of that social equilibrium which must be had at any cost. It is much cheaper to prevent a political upheaval than to suppress it, and prevention is only possible by such reforms as the economic and social conditions of a country demand, being introduced at the proper time. The rulers of the country know that the time is ripe for this change, in the direction of our educational efforts, and public opinion is in favour of it.

This must be our guide, as every thinking man knows it is only the general sentiment that gives a law its vitality, and makes the introduction of any alteration or innovation possible. India is making rapid strides towards self-government, education and development among other things being already in their own hands, and it is the use she can make of the transferred subjects that will prove her fitness, and the justice of her claim for full autonomy. Political power, and industrial efficiency go hand in hand. Political power no longer depends upon armies, but upon money and produce, and government by the people can only be maintained by the wealth producing power of the people. In economic theory, increase of population is one of the signs of a country's prosperity, but, this theory presupposes that the country's resources in agriculture and industry develop with equal rapidity. In India this has not been the case, and there is every reason to believe that the natural increase of population only serves to accentuate poverty. This problem of development is the gravest matter facing the Indian Government at the present day, and any and every means must be used to solve it.

The only way to tackle such a problem is go to the root of the trouble—there can be no two opinions about this root—it is clearly the lack of education and training of the producers resulting in inefficient work, and consequently high cost of production. No industrial progress is possible whilst such a state of affairs exists. It is the fashion just now to talk about retrenchment, but people do not stop to think that retrenchment is not an admirable thing, and can never be more than a temporary expedient. The solution for the eternal problem of making ends meet is not always to be found in cutting down expenses, and the sensible man who finds that his income, although economically expended, is not sufficient for his needs, would aim at increasing the income. Retrenchment does not mean economy, and very

often proves quite the opposite, such as when retrenchment cuts out a productive expenditure. When a country reaches the stage where more taxation is impossible, there is nothing left but to cut down the expenses of administration, or develop the resources of the land—this is the position of India at present, and any retrenchment that can be carried out will only temporarily affect the balance of expenditure and income, so that we are faced with the absolute necessity of increasing the national wealth. Look at it how you will, there is no alternative.

Vocational education, by training boys to produce wealth, is the proper beginning for industrial development, and the foundation upon which it is possible to build up the agriculture and industries of this country. The educated boy will bring into industry not only a knowledge of the operations of the craft, but a wider knowledge, and a power of applying it to productive ends. The skill of the Indian craftsman is proverbial, and to the European craftsman accustomed to use the finest equipment and tools, it is a source of wonder, but, the want of organisation, and the distressing conditions under which the work is very often carried on, are wasteful of material and labour.

Vocational Education is a specialized training for a definite purpose, and may properly be called a combination of general and technical education. It is something more than manual training, which is simply an educational exercise, intended to develop practical qualities, and something different from Industrial Education, which gives a very limited amount of education, combined with a long course of workshop practice. Vocational Education is primarily intended to lead to the full development of the resources of the country, by encouraging boys educated up to the High School standard to take their proper part in such development.

Producers and consumers have a distinct ratio in point of numbers, and whenever the consumers or non-productive workers, exceed their economic margin, they suffer by unemployment and eventual starvation. In this country the educated people take no part in productive work, which is explained in various ways, caste or social or religious custom, but, I do not intend to argue this point, and leave it to men better qualified than I am to discuss it. What I want to point out is, that the time has come to change it. Natural laws are at work, which make this change imperative, and natural laws cannot be resisted indefinitely.

In Europe and America the best brains of the country are in the business of producing wealth, and this very largely accounts for the riches of the West. The designers, inventors and organisers of the manufacturing world are men of a high standard of education, both general and technical, and they need to be, if they are to engage successfully in the fierce competition of the modern industrial life. They must be assisted by work people well organised and disciplined.

How can India expect to compete if her educated sons hold back ? Of necessity, at least 80 per cent. of the population must earn their living by productive work. They must work with their hands as well as their brains, and as the whole social and political stability of the state, depends upon their working intelligently, they should be educated for their work, and not away from it. By attracting High School boys into industry we shall at once relieve the economic pressure upon the educated

classes as a whole. The advent of the educated craftsmen will increase the volume and quality of the production, which is the essence of industrial development. This in its turn will increase the demand for such unproductive workers as clerk, and salesmen, thus making more work for all classes of the community. Three things are required for industrial progress, Capital, Intelligence, and Labour. Capital is always available for anything that promises a favourable return, labour is here in abundance, but the intelligence which is the link in the chain, can only be supplied by the educated classes. To supply this, it is necessary to awaken the interest of our school boys in industry as a career, and to give them facilities to secure a suitable training, and we must give it to them during their school life. The special school designed to give training in some one or other of the various trades, has not proved a great success in any country. This may be accounted for by the fact that the standard of general education attained by the pupils has usually been too low. In special schools too much time is devoted to acquiring the mechanical skill of hand, at the expense of what we may call the skill of brain.

Skill of hand is valuable in its way, but there is no comparison between copying something and the development of an idea. Ideas are the product of the higher mental processes and it is very rarely that they are evolved by the uneducated workmen. Mechanical hand skill can always be matched and beaten by machines. From this, we may see that the higher the general education of the craftsman, the better. The educated workman will have powers of organisation, and an inclination for orderly work, that is invaluable in any workshop. His trained intelligence will help him to make the most of his tools and materials, and to adopt others to his needs, thereby increasing the quality and quantity of his output. It will help him to buy and sell profitably, to develop new and original ideas for the use of materials to hand, and to economise labour and material, so that he and his assistants will get the maximum benefit from their industry. To the educated craftsman work with the hands ceases to be labour, and becomes a means of self expression.

We are told that to the educated Indian, manual labour is revolting, and that the man who works with his hands is looked down upon. This is the natural result of the present state of affairs. When labour is left without education, or educated guidance, it becomes incompetent and discredited, and the better classes hold off from it, but, holding off is no remedy and we cannot allow the disease to go on. Only when manual labour is done without intelligence is it degrading, and in the same way is any other work equally so, under the same conditions.

Our work can be the medium of expressing our personality. The potter throwing his clay on the wheel, and creating beautiful forms is no more degraded than is the clerk filing invoices. It is true he gets clay on his hands, but, clay washes off even easier than ink. Who enjoys his work the more? The clerk cramped on his stool in a dusty office, tied down to arrive at certain foregone conclusions which will be checked by his superiors to a point of exact agreement, or the potter, free to work his will on the plastic clay, working very often in the open air, singing as his wheel spins round, and the clay takes on one form of beauty

and interest after another, until he is satisfied, and permanently hardens this child of his hand and brain? It is not the work that is revolting, it is the false prestige, foolishly associated with non manual occupations, and the poverty of the working classes that prejudices the educated Indians against working with his hands. The clerk when he is employed may earn more money than the potter, though there is not the slightest reason why he should, and the time is fast approaching when he will not.

In choosing a profession the question of money is not everything. One has to live all his life at it, and if it is work he enjoys one may be sure of a life of happiness, even though he does not make a fortune. This brings us to the prospects for educated boys in industry—to begin with, outside the big cities there are no large industries worth mentioning, and we must not forget that over 90% of the Indian people live outside the cities.

The cottage industries or handicrafts are the only possible addition to agriculture. This type of industry is mostly handwork, but it may be largely helped by modern mechanical devises worked by hand power. These industries have been carried on in a more or less haphazard way for more years than we need stop to count, and in bygone years their products were world—famous for their invention, beauty of form and colour, design and ingenuity of workmanship. The modern industrial organisation of Western countries has replaced many of them, and the use of machinery and mass production methods by other countries is a severe competition, but it is not a final and determining factor, and can be counteracted by the adoption of some of the Western methods that are suitable to conditions here. Most of the manufacturing methods of European countries are applicable here, with some modification.

For such industries as require a large amount of hand labour, very little modification is needed, for here we have abundant labour, uneducated it is true, but much cheaper and almost equal in manipulative skill. With proper control and direction this labour could compete successfully with any other country, but, there is at present no body of men knowing the technicalities of productive work, and with sufficient education to undertake this control. For this grade a special type must be trained, possessed of a general education of at least the High School standard, and a thorough practical knowledge of the business of the craft. They must be able to perform every operation of the manufacture, to originate and develop ideas, and carry them through to completion. They must have sufficient knowledge to enable them to carry on profitably, buying, making and selling, employing, supervising, and directing labour, and inventing new methods to produce new goods. If such men are made available in sufficient numbers, this will become a rich country. Vocational classes in the High Schools will do this, but it is necessary that these classes shall be conducted on business lines, and with a real workshop atmosphere.

It will not do to think that it is only the workshops that are wanted, or that the workshop is only another classroom. The School workshop, if it is to give the training that is wanted must be a real workshop producing goods economically and

efficiently that can be sold at the market rate. This workshop atmosphere is very important, as the boy must realise that in this part of his work he will have to be thoroughly expert and capable. It is not a question of passing examinations, and acquiring a certificate that qualifies him for all time, and for which the element of competition ceases as soon as he has passed. In industrial life the completion will go on through the whole of his career, these classes should earn a profit, and this profit could be shared by the boys who do the work, with a small percentage to the teacher.

The earning of his share of the profit is not the least part of a boy's training, and it will give him an opportunity to acquire some capital before he leaves school, thus fitting himself up with tools and equipment by his own skill and labour. The share for the teacher is necessary so that he shall have a direct personal interest in the success of his workshop class, and use every effort to improve the quality and quantity of the output.

In this way the classes may be put upon a co-operative basis, teacher and pupils working together, and sharing the benefit. Co-operation is the most hopeful plan for industrial development in India. The principles of co-operation should be taught in all schools. Boys trained in vocational classes could form themselves into co-operative societies. The sale of the produce of vocational classes will require some sort of organisation, and in the first place must be done through ordinary business channels, but, when the schools are established, and the volume of production can be estimated it would be possible to arrange a central co-operative buying and selling agency. By co-operation an economy of capital is affected, the exchange of goods for goods, or goods for labour can easily be arranged in the village co-operation, in such a way that the labour of a man has a definite value in food, cloth or some other commodity, and a man who is willing to work will be sure of employment if he will take payment in kind.

The Budget and Education.[1]

By the Rev. W. Meston, M.A., B.D.

The time has once more come for us to review the Budget of the Government of Madras in so far as it affects education. On pages 132 to 158 of the Civil Budget Estimate for the year 1924-25 the full figures are given. We shall confine ourselves, as formerly, to a consideration of the provision made for general, as distinct from professional, education. We shall also adhere to the four heads of University, Secondary, and Primary Education and Administration of Education.

A.—University Education.

Under this head there are five allotments two of which deal with professional education. The three concerned with general education are as follows :—

	RS.
(1) Grants to the University	1,15,500
(2) Government Arts Colleges	8,86,300
(3) Grants to Non-Government Arts Colleges ...	3,66,000

There will be some surprise at the amount of the grant to the University. Last year almost three and a half lakhs were voted ; this year the amount is not even a lakh and a half. This must not be taken to mean that a University costs less the longer it exists ; it only means that the University has not begun to spend. Last year the complaint in the Legislative Council was that the allotment was far too small ; but if the grant was small the expenditure was smaller. The bringing into existence of the various Authorities of the University was the work of several months, and it was not possible for the reconstituted Senate to hold its first meeting until after the close of the financial year 1923-24. To a Government in need of every pie this must have seemed a happy situation. It had allotted over three lakhs to the new University, even going so far as to take a lakh and a half from loans. In actual fact it has had to give the University only a little over a lakh, so that it has saved two-thirds of its allotment, it has been spared the pain of borrowing, and it has retained some of the perfume of generosity. Whether that perfume will continue to cling to it during 1924-25 remains to be seen. The present Budget provides only the Rs. 85,500 required by the Act and the sum of Rs. 30,000 for the Vice-Chancellor's salary. In the Memoranda by the Finance Secretary explanatory of the figures in the Budget it is tersely stated that "further schemes, when they are ready, can be met out of supplementary grants." In the interests of the University it is to be hoped that several good schemes will soon be ready.

[1] A paper read at the Missionary Educational Conference, Kodaikanal, May 27th, 1924.

One great omission will speedily be noticed by any one who scans the Budget figures. There is no provision for the Andhra University. Yet that provision is long overdue. The University of Madras is too heavily weighted ; the day of local universities has come, and the more quickly they are instituted the better. After the passing of the Budget there appeared in the press a column which suggested that the Honourable the Minister was at work on the Andhra University scheme. The notice was meagre and raised more questions than it answered, but what it said made it clear that close scrutiny of the scheme is required, and not least by the missionary societies that have it in their minds to give to the Andhra University the contribution of a united Christian College.

Turning now to the expenditure on the arts colleges of the University we find that the Budget provides Rs. 8,86,300 for the ten government colleges of the Presidency, and Rs. 3,66,000 for the 29 non-government colleges. The glaring discrimination made by last year's Budget in favour of government colleges is fortunately not repeated. But the figures as they stand give food for much thought. The following points are worth attention.

(1) The salaries of those members of the staffs of Government colleges who belong to the Indian Educational Service and the Madras Educational Service amount to Rs. 3,74,300. That is to say, the salaries of 47 professors and lecturers in Government colleges exceeds the total amount given as grant for salaries, equipment, buildings, and hostels to non-government colleges by over Rs. 8,000. (2) When we look at the amount of Teaching Grant voted for aided colleges we notice that it is actually Rs. 1,500 less than the amount budgetted last year. This is all the more remarkable when it is seen that the amount allowed for the teaching staffs of Government colleges has gone up by more than Rs. 20,000 above what was in last year's Budget. Can it be the case that while Government colleges have earned an increase of Rs. 20,000, aided college staffs are such as to earn a decrease of Rs. 1,500 ? (3) The grant made to aided colleges for furniture and apparatus is less than it was last year, namely the trifling sum of Rs. 37,500. Under 'Contingencies' there is an entry for 'Books and Maps' in Government colleges of Rs. 17,300 ; practically the half of what figures as a 'grant' in aided colleges is a 'contingency' in Government colleges. Is it the policy of Government that libraries should be starved ? (4) The building grants to aided colleges have been doubled, but that only means that a lakh and a half is to be spent instead of three-quarters of a lakh. There is something almost unbelievable in this ; and it cannot be that the smallness of the grant is due to lack of funds. For when we turn up the figures under the Public Works Department part of the Budget we find that one item amounting to a lakh and a half is inserted as the estimate for 'Extensions and Improvements to Umdabagh buildings,' and the grant for 1924-25 is one lakh. So that the additions to the buildings of one Government college are to cost as much as the total amount made to all the aided colleges in respect of their buildings. This is worth keeping in mind. (5) The amount of grant for hostels to aided colleges has also been doubled, that is, last year's quarter of a lakh is increased to the princely sum of half a lakh. This needs no comment. I would only draw your

attention to the fact that here again the reason of the smallness of the grant cannot be found in the lack of money. The amount spent on Improvements to the Madras University Students' Club during 1923-24 was to be a lakh and a half, and in the present financial year it is to be Rs. 10,000. The University Club has done an immense amount of good, and I have no wish that the expenditure on it should be diminished. But just because of that I can plead with all the greater emphasis for a more satisfactory distribution of public funds.

It is obvious, then, so far as colleges go that while the Budget does not repeat the glaring defects of the previous year it still fails to make adequate provision for the colleges by which the great bulk of the education of the Presidency is being carried on.

B.—Secondary Education.

What is known technically as "European Education" is provided for under the Budget sub-head of Secondary Education. But the responsibility for this part lies with a member of the Executive Council and not with the Minister. It will have been noticed that more discussion than usual took place over this branch of education in the recent Budget debate. Criticism settled on the cost. The total number attending European schools is not quite 10,000, and the Budget allotment is Rs. 5,93,500. This sum is almost two lakhs less than that of the previous Budget. What might have been pointed out in the course of the Budget debate is that, as shown in the Director of Public Instruction's Report for 1922-23, while the total amount spent on these schools from private funds was Rs. 4,70,000, the amount received from Government as grants was Rs. 4,62,000. There is thus no ground for complaint as to excessive grants; the managers put in more than Government. All the same it seems to me that the question of European education requires to be faced on grounds much wider than the financial or the denominational. It will have to be looked at with reference to the whole educational system of the country, and the part which the domiciled community is to play in India. It is possible that a great unification of the prevailing system might be effected which would place European education on a proper footing and would fit the members of the domiciled community to face more satisfactorily the changing conditions of the time. But consideration of this would take us too far from our present theme.

As regards Indian Secondary Education the Budget allotments are as follows:—

	RS.
(1) Government Secondary Schools	3,31,000
(2) Direct Grants to Non-Government Secondary Schools ...	9,85,100
(3) Grants to Local Bodies for Secondary Education ...	9,30,900

Here again an attempt has been made to remove from the Budget the worst features of last year. The amount allotted to government schools is less than it was in 1923-24 by Rs. 8,000; the amount given to aided schools has increased by Rs. 60,000; and the subsidies to local bodies have jumped up by three lakhs. But these facts are not the only facts, and scrutiny of the figures reveals points which demand serious consideration. (1) According to the Report of the Director of

Public Instruction there are twenty-six government High Schools and eight Middle Schools, or in all 34 government secondary schools. To maintain these there have to be paid out of the public purse about three and a third lakhs. And if the cost of repairs to fabric and of additional buildings, a cost which falls under the D.P.W. account and is not separately enumerated, is taken into account it would be well within the mark to say that these 34 schools cost Rs. 3,60,000. Contrast this with 301 aided schools receiving as grant Rs. 9,85,100 ; nine times as many schools not costing the exchequer three times as much as the 34. (2) While the amount allotted to government secondary schools falls below the Budget figure of last year, notice how this has come about. It is because a lump sum provision for medical inspectors of Rs. 15,000, inserted in last year's Budget but not made use of, is deleted from the present Budget. In reality therefore the government secondary schools are costing public funds Rs. 7,000 more than they did last year. (3) As regards the additional allotment of Rs. 60,000 to non-government secondary schools it is worth while noting that about a quarter of it, Rs. 13,100, is a new grant for vocational training ; that the teaching grant to girls' schools has been cut down by Rs. 4,000 ; and the grant of Rs. 5,000 for medical inspection has been wiped out. The increase of Rs. 60,000 over last year's grant does not necessarily mean an additional grant to the secondary schools that were in existence when the previous Budget was drawn up ; for the number of aided secondary schools has increased by five. (4) There are 199 secondary schools managed by Local Bodies, 106 high schools and 93 middle schools, and the subsidies given to them come to Rs. 9,30,900. Aided managements maintain eighty per cent. more high schools and twenty-five per cent. more middle schools, and they receive only half a lakh more than the subsidy received by local bodies. If grants-in-aid were allotted after the same fashion as subsidies then secondary aided schools should receive additional grants not of Rs. 60,000 but of over four lakhs.

The Commissioner for Education with the Government of India holds no brief for primary aided education, but he looks on secondary education as a field in which the presence of private effort may be supported by strong arguments. Evidently the Government of Madras, if it speaks its mind through its Budget, does not look on financial support as one of these arguments.

C.—Elementary Education.

The Budget provisions for Primary Education are as follows :—

		RS.
(1)	Government Primary Schools	39,400
(2)	Direct Grants to Non-Government Primary schools ...	30,000
(3)	Grants to Local Bodies for Primary Education ...	77,33,800

The following points may be noticed. (1) Government's policy of withdrawing from the management of primary schools is taking effect with the result that in the present year's Budget there is only Rs. 39,400 for departmental primary schools as against Rs. 1,24,000 last year. (2) An enhanced allotment has been made for building grants to Indian orphanages. This is an important step, and is being taken

ready advantage of. (3) Of the Rs. 77,33,800 given as grants to local bodies, about Rs. 30 lakhs go to the District Educational Councils, and about Rs. 45 lakhs to District Boards and Municipalities. I leave it to those who are on District Educational Councils to say whether this distribution is satisfactory. I certainly have heard little complaint. I would only point out that while not quite six and a quarter lakhs of boys and girls are in the primary schools of District and Municipal Boards there are over nine and three quarter lakhs in the aided and unaided primary schools under private management.

D.—Administration of Education.

The expenditure under the head of Inspection has gone up by over Rs. 60,000 ; but this must not be hailed with too great satisfaction. It does not mean a larger inspectorate, but only that those belonging to it have qualified for larger pay. In actual fact the number of inspecting officers budgetted for is one less than was the case last year. In our previous review we saw that the reorganisation of the inspectorate had given the Presidency fewer officers to carry on this all-important work. Evidently the downward tendency is not to be arrested. This is a serious matter. On the 31st March 1923 there were 35,592 primary and secondary schools for boys in the Presidency, and the inspection of these was being conducted by 21 District Educational Officers and 253 Deputy Inspectors ; while there were 2,831 girls' schools and their inspection was being carried on by five inspectresses, three assistant-inspectresses, and 21 sub-assistant inspectresses. Is it possible for a staff of such limited proportions to go into what is being done in all these schools? Still more important, is it possible for these inspecting officers to do what is so essential, namely to advise and encourage the teachers ? The inspectorate requires to be greatly strengthened, and keen eyes are watching whether it is being manned by those who have intimate acquaintance with the technique of teaching, true sympathy with real educational endeavours, sincere abhorrence of rigidity, and a thorough belief in the value of education for all classes of the community. And unless money is spent for the attainment of these objects there will come a day when the Ministry of Education will be confronted by a body of parents, tax-payers, and rate-payers who, firmly believing in the Reforms scheme, will demand that it be applied to the administration of education.

E.—Conclusions.

(1) There is money for education, but what there is not being distributed in the most effective or economical fashion. This is a matter which affects the whole community.

(2) It is high time that the Educational Department was confined to the work of administration and inspection. The growth of educational authorities demands a strong unifying administrative force ; and the interests of the rising generation as well as of the teachers demand a strengthened inspectorate.

(3) The Presidency requires that its teachers should be organised on a professional basis. The service basis, in the conditions which now obtain, introduces

separation instead of union into the teaching body; and from the financial standpoint introduces an unnecessary drain upon resources.

(4) Now that the Grant-in-Aid Code is under revision, every endeavour must be made to secure a satisfactory Code and the generous working of it. While reliance upon private effort is being urged by the Hon'ble the Minister as a great means of development, the practice of the Government of Madras, as evidenced by its Budgets, is setting steadily towards a policy which either discourages or fails to encourage the aided system. This anomaly needs to be recognised; and the facts need to be pressed home. It is the aided system, as the Minister if not the Government perceives, that holds out one of the greatest hopes of the extensive and economical diffusion of sound education through the Presidency.

(5) The present system of subsidies to Local Bodies requires serious consideration. Should it not bear some relation to the system of grants to aided schools? Is the present method one best calculated to foster the progress of local self-government in the field of education? These questions are vital, and call for answer.

(6) There is need for a further, if gradual, extension of the powers and functions of the *ad hoc* educational authorities. By this means it will be possible to institute a combined system of local and private effort in each district, and throughout the Presidency, and to finance that system by an allocation of grants which will do justice to both agencies. If this is done there will be a double advantage. For one thing it will place control in the hands of those who have a stake in the education of the country. And for another thing it will help towards a national system of education, where agencies co-operate and funds are distributed simply according as a need exists and the appropriate agency for its supply is at the service of the country.

Editorial Notes.

WITH THIS NUMBER A NEW DEPARTURE in the history of the Magazine is brought into effect : it will be issued to every student of the College, at a lower subscription. The general character of the Magazine will remain unchanged, and we trust that our old subscribers, especially among the ever-increasing body of old students, will continue to accord us their support. But we shall endeavour to give greater prominence to the activities of the present members of the College, so as to maintain as complete a record as possible of the working of the various College institutions. If this is to be achieved, the persons interested in the different clubs and societies must do their part in keeping the editorial staff informed, and we take this opportunity to bespeak their cordial co-operation. But the claims of the old students will not be forgotten ; and if they also will do their best to keep us informed it is our ambition to make the Magazine an effective organ of mutual information among all those who have gone out from our walls. We appeal to all, past and present alike, to do all in their power to make the Magazine useful as a focus of all the interests of the College.

WITHIN THE LAST FEW MONTHS the hand of death has removed two men who were in their day prominent in the life of Madras and both of them closely connected with the College as members of the Council, Surgeon-General W. B. Bannerman and Sir Bernard Hunter. General Bannerman's active career in the I. M. S. was largely spent in other parts of India, but it was from Madras that he came and it was to Madras that he returned in the end to fill the post of Surgeon-General. Many of our readers will recall his kindly personality and his great willingness to assist the College on the Council of which he held an honoured place. Sir Bernard Hunter also was taken from Madras to fill a larger sphere in the financial life of India, but it is as a Madras man that he made his name and that we love to think of him. He too with all the cares that fell upon him gave freely of his powers in the interests of the College, and all who had the privilege of serving on the Council with him will recall with admiration the way in which his insight and ability were placed at its disposal. The record of the College Council forms an interesting index both to the position of the College and to the character of public life in Madras as revealed in the careers of its leading citizens. In that roll of honour few names are more deserving of attention than that of Sir Bernard Hunter. To financial ability of no mean order he added high character and a great measure of personal charm. His removal, at a comparatively early age, is a loss which we who knew him as a friend of the College cannot but deplore.

SINCE OUR PREVIOUS ISSUE the new Senate of the University has held its first meeting, which was signalised by the presence of H.E. the Chancellor, who delivered an inaugural address. The temper of earnest consideration, of freedom from rancour and bitterness, displayed by the Senate augurs well for the future. At an early date, we believe, the Academic Council is to meet, and we trust that its activities will be marked by a similar readiness to serve the cause of higher education throughout the Presidency. The difficulties besetting the path of the projected Andhra University will not be easily overcome, and it is an open secret that the Kerala University scheme has broken down. With financial stringency as a chronic impediment, it is evident that for a long time to come the interests of advanced education in the Presidency must continue to depend on this University. It is to be hoped, therefore, that all its authorities, Senate, Syndicate, Academic Council and Council of Affiliated Colleges, will put their full strength into their respective tasks.

What Men Think.

Without Philosophy no Civilization !

It is a fairly common opinion that while individuals may continue to maintain a deeply moral quality of behaviour even when they have ceased to possess any living religious faith, in society at large morality cannot long maintain itself without religion. But this familiar opinion wears an unfamiliar guise when it is presented in the form of a contention that civilization cannot survive without philosophy. It is so presented by Dr. Schweitzer, the famous theologian and musician who has become a medical missionary in tropical Africa. He has written two volumes to prove that civilization is in a state of collapse, and that this collapse is due to the absence of a worthy philosophy.

"Plato was wrong", he says, "in holding that the philosophers of a State should be also its governors"; but he was wrong only because this would assign them a position not too high but too low ! "Those who command, whether it be in a large or a small sphere, can only carry out what is already in the thought of the age. They do not build the instrument on which they have to play, but are merely given a seat at it. Nor do they compose the piece they have to play ; it is simply put before them, and they cannot alter it ; they can only reproduce it with more or less skill and success. If it is meaningless, they cannot do much to improve it, but neither, if it is good, can they damage it seriously." It is the philosophers, the thinkers of the age, who are the composers of the music played. Or—to change the metaphor—the philosophers are the all-important 'General Staff' of the social army, while kings and governors are only the commanding officers, who convert the general directions of the Staff into orders of the day. "Kant and Hegel have commanded millions who had never read a line of their writings, and who did not even know that they were obeying their orders."

"The fall of the Roman Empire in spite of the empire's having over it so many rulers of conspicuous ability, may be traced ultimately to the fact that ancient philosophy produced no theory of the universe with ideas which tended to that empire's preservation. With the rise of Stoicism, as the definitive answer of the philosophic thought of antiquity, the fate of the world down to the Middle Ages was decided." For Stoicism was unable, in the moral sphere, to produce anything but an ethic of resignation, and "the idea of resignation, noble idea as it is, could not ensure progress in a world-wide empire. The efforts of its strongest emperors were useless. The yarn with which they had to weave was rotten."

On the other hand, in the eighteenth century, despite the circumstance that in most places government was in the hands "of insignificant rococo-sovereigns and rococo-ministers, a progressive movement began among the nations of Europe which was unique in the history of the world. Why ? The thinkers of the Illuminati and of rationalism produced a worthy theory of the universe from which worthy ideas were spread among mankind."

Unfortunately, however, this great movement was cut short in mid-career because, according to Dr. Schweitzer, when history had begun to shape itself in accordance with these worthy ideas, " the thought which had produced the progress came to a halt." Consequently we find ourselves to-day among a " generation which is squandering the precious heritage it has received from the past, and is living in a world of ruins, because it cannot complete the building which that past began. Even had our rulers and statesmen been less short-sighted than they actually were, they would not in the long run have been able to avert the catastrophe which burst upon us. Both the inner and the outer collapse of civilization were latent in the circumstances produced by the prevalent view of the universe."

Essentials of ivilisation.

As the reader will have gathered from the last quotation, Dr. Schweitzer considers civilization to be at present in a state of collapse. Material progress there still is, but the essence of civilization lies not in that but in ethical progress. Civilization, in his view, essentially consists " in our giving ourselves, as human beings, to the effort to attain the perfecting of the human race and the actualization of progress of every sort in the circumstances of humanity and of the objective world." Now no one will impose this task on himself who looks upon our human existence in this world as meaningless. Moral enthusiasm and an optimistic outlook on life are essential to the maintenance of civilization. These vital preconditions were present in the eighteenth century, but their philosophical basis was not fully thought out. According to Dr. Schweitzer, the great Idealistic successors of Kant made the mistake of supposing that what the current optimistic outlook on life required for its philosophical grounding was an optimistic nature-philosophy. Instead of founding their *world*-view on a *life*-view, they tried to found their *life*-view on an optimistic *world*-view. Dr. Schweitzer holds not only that they failed in this endeavour, but that such failure was inevitable because no true world-view can be optimistic. Their optimistic nature-philosophy fell into ruins about the middle of last century as a consequence of the progress of science. As a result, we are to-day without any worthy philosophy. That is why we are dominated by the cult of *real-Politik* and are destitute of reforming vigour.

We are unable to consider Dr. Schweitzer a very trustworthy critic of Idealistic philosophy. His antagonism to it appears to us more temperamental than based on a really penetrating judgment. Nor do we think he does much to clear up the issues by his distinction between ' world-view ' and ' life-view '. For most people ' life-view ' is merely a part of ' world-view,' and not something to be set in contrast with the latter ; and if the case is different for Dr. Schweitzer, this is simply because in the realm of physical occurrence he despairs of the possibility of philosophical knowledge, and in that sense possesses no ' world-view ' at all. Perhaps the contention which he really wishes to press by means of his distinction between ' life-view ' and ' world-view ' is that ethics should not be based on metaphysics but rather *vice versa* ; yet if so, we doubt how far his own ethics is really plausible apart from his very speculative metaphysics of life.

Deeds that are Prayers.

Although we do not share Dr. Schweitzer's opinion that to-day Idealism stands bankrupt or that a true world-view cannot possibly be optimistic, we nevertheless recognise a half-truth in what seems to us this error of his, and we think that in his two volumes on 'The Philosophy of Civilization' there sounds a note to which it is important that our generation should give heed.

Idealists will consider that Dr. Schweitzer errs by too directly identifying the world as we know it with the real world. But even an Idealist may well agree with him in refusing to be optimistic about the world as we know it—in refusing to be confident that that world can be redeemed and perfected from within by mere intelligent application of the agencies which it can itself supply. The original Christian preaching gave no encouragement to such optimism as this. It considered the world as we know it a world to be ended, rather than mended. In Christ's view, as Dr. Schweitzer rightly reminds us, the Kingdom of God could not be brought to pass by human contrivance and organization. It was to be "brought about by God when He transforms this imperfect world into a perfect one"; and human moral endeavour, instead of being looked upon as its producing cause, was on a true estimate "only like a powerful prayer to God, that He may cause the Kingdom to appear without delay." These words occur in a little book by the same author on 'Christianity and the Religions of the World' and we take it that a desire to find for this conception of morality—the conception of it as *conduct which is valuable, not because it is useful but because it is an acted prayer*—a philosophical form of expression, is a central motive of his larger work on 'The Philosophy of Civilization.' Even if he has not been conspicuously successful in this endeavour, no reader can fail to profit by steeping himself in the thought of an author who, while pessimistic enough not be sure that the world is worthy of being lived in, has at the same time the brave optimism to feel certain that life itself is worth living, so long as it consists in "self sacrifice for the sake of other life motived by reverence for life itself." This combination of optimism and pessimism has sufficient resemblance to the way in which optimism and pessimism mingle in the thought of Christ to make it very instructive to the Church of to-day, which still has too much of that shallow optimism which imagines that careful organization is enough to work wonders of social reform and moral uplift.

What is Memory?

It is by no means easy to state precisely what happens when we remember, and what happens or does not happen when we forget. Remembering and forgetting belong to the type of facts which are difficult of exact observation and experiment. At the same time they are among the commonest of every day life. Dr. Beatrice Edgell of the University of London has just written a monograph which deals with *Theories of Memory*, in which are treated the biological conception, the behaviouristic view, the theory of the New Realists, Bergson's doctrine, and the author's own conclusions as a psychologist. Her emphasis is on the continuity of the processes

of the mental life. "Memory is cognition of something known before. The particular memory is in continuity with the former knowing. The former knowing was occasioned by sense-impressions; the image continues the work of the former sense-impressions. Since the continuity is not occasioned by a repetition of the sense-impressions, it can only occur as an event because it is 'required' by the character of the mental processes themselves. We may say that it stands to those processes in a part-to-whole relation, although we can only trace out the relation in terms of function." Continuing she says, "If we ask, then, 'what brings imagery into being?' the answer is, the nature of cognition and conation. Granted that one cognitive process can carry on the function of another of the same character as itself, granted that there are within mental life active processes of wanting, striving, the running of whose course brings about the relations of cognitive processes to one another and to conation, such that any one is incomplete in respect to the function of that conation without the others, then, if hereafter a part of this organisation (or 'structure') be given, and the processes necessary for its completion be not given, these processes will be reproduced in imagery. The organisation of the whole requires this . . . . The imagery does the work of sense-impressions and is an event in mental life just as a sense-impression is an event" An event gets the character of pastness in that the object made its sense-impression in the past. The cognition is a present event; the object known is past.

Political Instinct: Eastern and Western. In the March number of *The Young Men of India* there is a report of an address delivered by Professor Graham Wallas before the Indian Students' Union of London on the political instincts of the East and West.

The word 'instinct' has two entirely different meanings, which confuse each other. When you say a man does a thing instinctively, you mean he does it without reflection. He may do it without reflection because of the way in which he was born, or because of the way in which he has been taught. If you and I picked up a horse-shoe on the floor and found that it was only just not red hot, we should drop it at once instinctively. That is to say, we should have dropped it if we had never heard of horse-shoes. If you and I received an invitation to talk from Mr. Newland's (the communist) platform, we should shrink from the proposal possibly because we are taught to associate certain ideas with this man, and certain feelings with the ideas. Both are instinctive in the sense that they come without reflection to one; but instinct, the unreflecting feeling in one case is due to birth, and in another case is due to acquired habit.

The whole course of psychology taught during the last fifteen years has been to increase the importance which psychologists attach to the conception of habit-and decrease the importance which the psychologists attach to the conception of inborn differences and inborn instincts. Instinct is dropping out, and has lately been defined as the power of acquiring habits. There are, that is to say, certain qualities which are common to all mankind from birth upwards, and it is probable that there

are qualities between different races which also are there from birth upwards. But we have to be extremely careful in ascribing the differences of habitual feeling and habitual action to inborn qualities. If a man from China were to ask me in what inborn respect the man from China differed from the North European, I should find it almost impossible to form any opinion whatsoever. I think that probably there are differences from birth, but of those differences in form in us, students are at present almost entirely ignorant, because so very much of what they had supposed to be due to differences from birth have been proved to be differences from acquired habit.

That is an essential fact when you are dealing with the problem of East and West. It is an essential thing for the student to remember that he must constantly fight against the temptation to believe that differences in the man's make-up as he sees them now are differences due to his birth. He must remember that constantly the assumption is that they are due to the atmosphere, tradition, education in a wider sense which the man has received If I were to ask what is the thing with regard to the inborn instinct which the politician ought now to remember in dealing with the various parts of the world, we must recollect that the world is now one place that can be reached in an instant by the telegraph, soon by the telephone, soon circled about in a couple of days by the aeroplane, the thing that the politician has to remember ninety-nine times out of a hundred is the qualities in which all mankind are alike, rather than the qualities in which all mankind differ. There are certain qualities which are common, as the feeling for a man's right. A man will rather strave, he will rather die in battle, than stand certain forms of insult, and that is a fact all over the world. That is a fact which any European nation, which has to have contact with the East ought to remember every morning when it gets up, and every evening when it goes to bed.

One has to remember that what we call liberty, what we call self-government, the feeling that somebow or other, in the community in which you live, your will and your desire do count as much as the wills and desires of other men, is also an inborn fact that extends right round the whole circle of the globe. But while it is necessary that we should minimise the difference in mental make-up due to inheritance, at the same time we must not minimise the enormous difference which is created by the tradition, the atmosphere and education in which men are brought up.

When the great war was going on, it was an extremely common thing to say that it was a war between two different types of civilisation, between two different conceptions of thought. Now, although we are not fighting and killing each other by the use of deadly weapons, nevertheless there is another war going on between two different types of thought which are dominating politics at this moment in Europe. The French and ourselves biologically are curiously alike. Almost the whole northern half of France represented the same political mixture of classes as the southern half of England. There are hardly any two peoples whose mixture of races is more precisely the same as the French and ourselves. And yet there is an immense difference between the habit of thought represented by what the French call

"logic", and represented by what we are so proud of, the habit of 'muddling through.' That is a point not due to any difference to birth, to any biological condition, but due to the fact that the Frenchman is brought up in a country with one ideal way if thinking, and we are brought up in a country with another ideal way of thinking.

You people will have to decide, when you become responsible for your own Government, which of those types is the best. Remember any Government of India, whether it is a Government of India under the Montagu-Chelmsford scheme or under full Dominion Powers, or under an absolutely independent state, whatever it may be, will have to deal with the intolerably difficult problem of either centralized or decentralized power in a country with a great admixture of races and religion and social habits, a country in which tolerance will be extraordinarily important.

About the year 1888, when we were on very good terms with the Germans, I remember that our Government asked a young high German official to come into the Colonial Office in order to learn how we managed affairs. He came and was astounded with the habit of mind which he met there. He said, "you people seem hopelessly illogical. You have a certain tribe which behaves abominably. It murders a messenger ; it crucifies its enemies ; it does all sorts of things ; it sends brutal insulting messages ; and nothing happens. Unless you really feel inclined to fight that tribe, you do not fight it. We Germans when we have a *casus belli*, a logical case for war, we fight. You get the logical case for war every other day, and you do not fight until you feel inclined to fight, and then you seem to hit reasonably hard."

That is essentially our attitude of mind. We wait until we feel inclined to do the thing, and we rather ignore the words, the formulae, in which rules of conflict can be expressed. When you are dealing with toleration and when you are dealing with a world in which peace is absolutely necessary, I think there is an immense amount to be said for our view. It horrifies me to read French newspapers now, with the constant insistence upon the hard facts of the treaty of Versailles, with their constant treating that as a religious dogma from which at the cost of eternal punishment no single step aside must be made. On that point my strong impression is that it would be well for the Indian statesmen of the future rather to turn and learn the lesson which our young German learnt in the Colonial Office, which we have not always taught people in India ourselves, that it is well to be patient and not well to act upon a formulae of words.

Book Reviews.

Bengali Religious Lyrics, Sākta. By E. J. Thompson and A. M. Spencer. Calcutta: The Association Press, 1923. Pp. 103.

The Editors of *The Heritage of India Series* have already done fine service in the previous volumes of the series which enable English readers to get an insight into the types of literature which appear in the various vernaculars. A high degree of excellence was attained by Dr. Macnicol in his *Psalms of Maratha Saints.* And the present volume which draws upon Bengali literature is a fitting companion to that of Macnicol. The authors have done their work carefully. The introduction gives a succinct account of the rise and the characteristics of the Sākta literature, and the latter part of the book is made up of English renderings of the Bengali Sākta songs.

A Sākta is a worshipper of the female energy (*sakti*) of one of the Hindu deities. For practical purposes, however, the authors tell us that saktism may be regarded as the worship of Kali or Durga, the consort of Siva. The manuals of saktism are the *tantras* of which there are a great many and which represent "a great jungle of ritual." The object of devotion is known by different names according to the manifestations: now Durga, the unapproachable; again Parvati, the daughter of Himalaya; still again Kali, the terrible; but at other times Uma, the gracious and benign. The worship of Kali or Durga has so often been accompanied by evil elements that one wonders how this goddess should ever come to be the object of love and devotion such as we find expressed in the songs of the Sākta poets. She is sometimes regarder as delighting in human sacrifice, and the Thugs who strangled their victims did so in the name of sacrificing to Kali. In its most obnoxious form saktism takes the form of partaking in the five *tattvas*—wine, meat, fish, parched grain, and sexual intercourse. The picture of Kali festooned with human skulls is not what one would expect to be the inspiration of the devotion of fine-souled poets. Indeed these are not the qualities which inspire our poets but rather benignity, grace, and sublimity. In these songs we have a splendid picture of the better side of saktism which should help us to guard against too hasty judgments on the basis of the erotic elements which characterise the "left-handed saktas."

The poet *par excellence* of the sakti school was Ramprasad. It was his trust in the Divine kindness and love that enabled him to overcome all of the erotic and blood-thirsty elements in sakti worship, and to lift it into quite a different sphere. The atmosphere of his songs reflect the merciful and ethical theism which is so characteristic of our age in every country. The outstanding Bengali manifestation of that movement is that it turns rather to the motherhood than the fatherhood of God. It is not unnatural that people should sometimes think of God in terms of motherhood as well as fatherhood. In Bengal there are many years when the rain

if neither over much nor too little, but Nature seems like a caressing Mother caring for her children. Yet there are time when Nature seems to be careless. and ogetful. Even then Ramprasad sings his songs of trust :

> Mother, you are in my heart.
> Dark Goddess, who says you are in my heart? You are a stony-hearted girl—a harmful delusion . . . . . He that knows, and rests all on you, him you will not help ! But will the man who knows the worth of gold accept glass? Prasad says : My heart is of the right tint of the lotus. You, building those five into one, dance and dwell in my mind.

In spite of his devotion Ramprasad protests against the formal side of religion, against the tantrism which was so typical of saktism. Pilgrimages are foolish, for one does not need to go anywhere to find the ever-present goddess.

> What have I to do with Kasi? The Lotus-Feet of Kali are places of pilgrimage enough for me. ' . . . .
> The worshipper of Kali laughs at the name of Gaya, and at ancestral offerings there and the story of salvation by ancestors merits.

Neither is there any merit in sacrificing. It is the devotion of the heart, *bhakti*, that is dearer to the Deity than any amount of gifts.

> Mind, why art thou so anxious? Utter Kali's name, and sit in meditation. From all this pomp of worship the mind grows proud. Worship her in secret that none may know. . . .
> Fashion her image with the stuff of mind, and set it on the lotus-throne of your heart. . . . Feed her with the nectar of devotion, and satisfy your own mind.
> Why seek to illumine her with lamp and lantern and candle? Light the jewelled lamp of the mind, let it flash its lustre night and day.
> Why do you bring sheep and goats and buffaloes for sacrifice? Saying ' Victory to Kali,' ' Victory to Kali,' sacrifice the Six Passions.

The authors tell us that Ramprasad is by far the most popular of the Bengali poets. Tagore is known in Calcutta, among the students, and in the Brahmo Samaj; but out in the villages of Bengal Ramprasad is known everywhere. Mr. Thompson says that he once asked a class of forty boys to write out a song of Tagore's, and only two were able to do it, but when he asked them to write out one of Prasad's there were only two who could not do it. The pandit and the peasant alike enjoy him. His songs are their delight in life, and their solace in death. Happily the little volume before us contains translations of seventy-five of his songs which enables the reader to whom Bengali is a sealed language to get a little of the spirit of the poet. There are twenty-eight other translations from other Bengali saktas, but, as the numbers indicate, the place of importance is occupied by Ramprasad.

Classical Sanskrit Literature. By A. Berriedale Keith. Calcutta : Association Press, 1923. Pp. 153.

Professor Keith's previous contributions to *The Heritage of India Series* were books of such high merit that we are warranted in expecting a good book when we look into the present volume. And the book fully justifies our expectations. It is a work of more than ordinary importance in that it deals with a body of literature concerning which the English reader will not find much available literature. Dr. Keith has done an enormous amount of work in the field, and the little book

under review breathes everywhere the authority of one who knows from years of patient research. It is really amazing how much he has been able to condense into so small a volume.

Classical Sanskrit Literature as surveyed here is the literature written before 1200 A.D., "a date conventional indeed" as the author suggests, "but yet late enough to include all the great masterpieces of Sanskrit literature." The author states his aim as that of reminding readers "of the richness and variety of the literature" of which his work treats, an aim which he has well accomplished. Whence came this classical Sanskrit literature? The first chapter answers that chapter by tracing its rise. However it is not the traditional answer that the early secular literature was largely in some form of Prakrit, and that Sanskrit was kept as the language for sacred writings. The one argument in favour of the older view is its simplicity, but Keith thinks that the complexity of the facts which have to be explained will not permit of such a simple explanation. He admits that there was a form of Prakrit probably in use in popular writing antecedent to the time of Panini, a language which was the vehicle for folk-lore, for example. Nevertheless there was also in all probability a prose Sanskrit in common use which paralleled the Sanskrit of the *Ṛgveda*. This was the language of hieratic speech, used in the various ceremonials. There was even an expiatory sacrifice, the *Sarasvati*, to be used to counterbalance any incorrect use of language in the ritual. There was a steady movement whereby the language of literature and that of the vernaculars grew apart "with the inevitable result that Sanskrit literature tended to increase in artificiality and lack of contact with real life." By 400 B.C.—the time of Panini—the standard of classical Sanskrit became pretty effectually fixed. Since then the predominance of Panini and his followers is unmistakable. By the second century before Christ Sanskrit had completely won from the Prakrits the ascendancy even in the matter of secular literature.

Professor Keith very rightly gives considerable attention to India's "greatest poet"—Kalidasa. We cannot but share with the author in his lament that there is so scanty trustworthy information available about the poet. The *Sakuntala* was the great drama to which more than anything else Kalidasa owes his fame. He was great however not only as a dramatist, but also as a lyric and epic poet. Our author finds a close analogy between Tennyson and Kalidasa, both of whom excel, he thinks more because of perfect accomplishment based on a high degree of talent rather than inspiration and genius. "The Kavya style unquestionably attains in Kalidasa its highest pitch, for in him the sentiment predominates over the ornaments which serve to enhance it, instead of overwhelming it. Sentiment with him is the soul of poetry, and, fond as he is of the beauty due to the use of figures, he refrains from sacrificing his main purpose in the search for effect." The date of Kalidasa is one of the facts that the data at hand do not permit us to fix with any confidence, but Keith thinks the evidence points to sometime about 400 A.D.

At the end of the ninth chapter the author summarises some of the characteristics of Sanskrit poetry :

"Life we are permitted to enjoy, we may drink deep of the pleasures of love, but we must not seek to fight against the overmastering power of fate. Had, indeed, fate been outside of us, had it been an alien power, the Indian might have seen man's duty permitted him to defy it in pursuit of his own ideals, but fate is nothing else than the destiny which has been decreed for one by the deeds of past lives through time without beginning. To strive against destiny is thus meaningless, and Sanskrit poetry loses thus the possibility of the beauty which is implicit in the tragedy of the struggle of man's spirit against powers, which avail to destroy him but not to deprive him of his constancy. As the Indian drama knows no true tragedy, so Indian poetry lacks any such motive, and it lacks also the charm which may be won from a poet's endeavour to interpret nature and human life in the light which appears only to the eyes of the visionary. The possibility of the noblest poetry was thus forbidden, but we may justly recognise that there remained open a field in which much could be accomplished of universal appeal and abiding worth, and that in its richness and beauty of form and sound Sanskrit presented a medium worthy of the highest flights to which any poet could soar."

Psychological Tests of Mental Abilities. By A. S. Woodburne, M.A., Ph.D., Madras: Government Press, 1924. Pp. 232. Rs. 2-8-0.

This excellent book had its origin in a course of lectures delivered by the author under the auspices of the University of Madras. It is a very good compendium of the subject, a remarkable epitome of about all the good things to be found in a very large number of books on the subject. It is a vast survey of the subject and might be termed a Review of the Whole Topic. The author is critical and judicious in his views. His style is easy and his thinking clear. The author states his purpose as follows,—

> "The purpose of this course of lectures, I take it, has not been to try to throw new light on the problems of mental measurement with which men have been struggling in other countries, but rather to give a little information whereby interest in the subject may be awakened, and those who are interested may know something about how to proceed in a tangible way."

A reading of the chapter headings will attract the attention of anyone interested in education. They are,—Historical Development ; The Object of Mental Measurement ; Intelligence Tests for Juniors and Seniors (two chapters) ; Performance Tests ; Group Tests ; Vocational Tests and Tests of Character ; Tests for Achievement ; Practical Problems for the Indian Educator.

In the second chapter is an interesting exposition of the object in mental measurements. The views of the most recent writers on this subject are carefully set forth and our author indicates his sympathy with the views of Thorndike and his school. We quote,—

> "In the main, there are two different points of view in regard to the nature of intelligence. One. . . . . maintains that there is such a mental phenomenon as general intelligence. The other. . . . . . is that there is no general intelligence but that there are particular intelligences, or better, mental abilities, which are independent of one another."

In chapters three to eight is an intelligent discussion of all the known tests bearing on the subject. The discussions are necessarily brief, yet full enough

to give a good idea of the nature of the tests, the methods of administering them, and the significance of the results.

The discussion of the relative merits of the Group and Individual methods of administering tests is closed with the following advice from McCall,—"A good practical rule is to first give group tests, accept their diagnosis for most of the pupils, and give further group or individual tests to the few pupils, who, according to the group tests, need special study."

The chapter on Vocational Tests will hold the attention. The author says of these tests that they "are a specialized use of the psychological test in the detection of vocational fitness. The method of procedure is two-fold. One is to use the intelligence tests as a measurement of vocational ability : the other is to use tests that have been specially devised to detect vocational fitness of a particular type." Our author then proceeds to discuss these latter tests. One is tempted to go into detail in reviewing this interesting chapter and also the chapter which follows on Tests of Achievement. We quote,—

> "We are interested in this subject (tests of achievement) with the bearing of mental tests on the classification of pupils and the organization of a school. . . . . . There are three ways in which it (this classification) has been done. First, children may be classified on the basis of intelligence. . . . In the second place, children are classified on the basis of the marks which are given by teachers—a pedagogical basis. . . . The third basis for classification is the educational test which is a standardized test of achievement."

Our author then proceeds to discuss these standardized tests. The usefulness of McCall's new term, "Educational Quotient," is worthy of deep consideration. One feels that this term must soon become of more service to educationalists than the term, Intelligence quotient.

The book is well written. There are a few typographical errors, the most striking being the use of the word "rate" for "rats" on page 100.

B. J. R.

Speeches and Documents on Indian Policy, 1750—1921. By Professor A. Berriedale Keith, D.C.L., D.Litt. London : Humphrey Milford, Oxford University Press. *The World's Classics Series.* Two Vols. 2*s.* each.

This addition to the excellent series of *World's Classics* published by the Oxford University Press differs from most of the books in that series by being a collection of speeches and documents instead of what is generally spoken of as a "classic." It is none the less a most valuable book and one that should be placed in every college library. The first volume deals with the period 1750—1858, and in addition to many interesting letters and speeches contains the East India Company Acts of 1765, 1773 and 1784, and the Government of India Acts of 1833, and 1858, and concludes fittingly with the Proclamation by the Queen to the Princes, Chiefs and the People of India, 1st November 1858.

analogy to the atom that one can get is the solar system with its vast empty spaces between the sun and the planets.

In an atom all the protons and about half of the electrons are packed together and form a nucleus round which the remaining electrons revolve like the planets round the sun. The simplest case is that of hydrogen. Its atom consists of one electron revolving round one proton. We get, however, a better idea of the structure of an atom if we take helium which is next to hydrogen in simplicity. Its atomic weight is four, and its atomic number two. Its atom, therefore, consists of two electrons circulating round a nucleus containing two positive charges, namely, four protons and two electrons. To get an idea of the relative size of the atom and its constituents we may imagine the nucleus as represented by a large pea and the planetary electrons as two smaller peas at a distance of a quarter of a mile.

The chemical properties of an atom are determined by the charge on its nucleus. Now the charge depends not upon the total number of protons and electrons in the nucleus but only on the difference between the number of each which it contains. We can, accordingly, have elements composed of atoms with nuclei of different weights but the same charge. Such elements are called isotopes because they occupy the same place in the periodic table. As an example, we may take chlorine which has the atomic weight 35·46. It has been found to be a mixture of two groups of atoms of atomic weights 35 and 37 mixed in the proportion of about three to one.

The experimental evidence for these and other facts regarding the nature of atoms is given in a very readable way by Mr. Sullivan in his little book. Mr. Sullivan evidently belongs to the London school of scientists, as he follows Sir William Ramsay in calling radium emanation 'niton.' Its discoverer called it radium emanation and that is the name by which it is generally known, so that it seems hardly justifiable to use another name.

A. M.

College Notes.

THE TIME HAS COME TO PASS IN REVIEW the activities of the Athletic Association during the year 1923-24. The year opened with the Henderson Football Tournament. This inter-class tournament was played through with considerable keenness. There is nothing in the whole round of our College Athletics more valuable than this tournament, for it draws more students into the game than any other. This year the Second Class proved themselves the best team. In the year that is now opening we hope every class will appear for all its matches. To play the game with no chance of winning is itself to be victorious. In the Inter-collegiate Tournament we played ten matches of which we lost one and drew two—not a bad record. But the tournament was not completed. We must see that no delays or obstructions to the successful progress of the Tournament arise from us. In the two knock-out tournaments that bring the season to a close the College did well. In the Presidency College tournament, we met the Medical College in the final. Owing to some interruption from the touch-line the match had to be stopped a little short of time, with the Medicals leading, one gone to nil. In the Dr. Wilson Tournament we again reached the finals, with the Medicals. Two good games, a credit to both teams were required to settle the issue. The first game ended in a draw in spite of over-time play. The second game gave us the victory, one goal in our favour. The credit for so successful a season is in no small measure due to the Secretary, P. Niman Koshy.

Football.

Team.

Md. Jalaludin ...	(Captain). Indisposed during the earlier part of the season; a clever forward.
P. Ninan Koshy ...	(Secretary). Did excellent work for the College; a strong, hardworking, reliable half-back.
K. T. Joseph ...	A clever, hardworking half-back.
Kanakadri Rao ...	Goalkeeper; saved the first match against the Medicals in the Wilson final.
George Kuruvilla ...	Back; a strong defence, gave confidence to the team.
P. C. Mathan ...	A strong, hardworking half-back.
Md. Anwar Hussain.	Inside left, a clever dashing forward; must combine with his outside better.
Shadrach Paul ...	Back; a keen useful player.
M. M. Philip ...	Inside right; has pace and height; promises well.
S. Rajan ...	Outside right; has pace, and a very good pass to the centre.
Vencatachellam ...	Outside left; a useful player, but handicapped against taller or heavier backs; will develop.

The Hockey team under the able leadership of Kuttappa and Sihamoni had a successful year though perhaps not quite up to the very high level of recent years. In the Tournament at the close of the

Hockey.

season, we met the Presidency College in an early round and lost to them after an excellent game. The Presidency eventually won the Tournament.

Lawn Tennis.

The Lawn Tennis players have undoubtedly felt the absence of Mr. Henderson whose strong play has for long been a tonic to the game on our courts. But nevertheless the club has had a satisfactory year, under the secretaryship in the earlier part of the year of P. Krishnaswamy Sastri, and later of V. Gopala Rao. The season closed with a singles Tournament of which N. S. Subba Rao was the winner.

Athletic Sports.

The College sports were held on our own ground on Friday, 25th January. There was plenty of competition, and a spirit of good fellowship and good sportsmanship prevailed throughout. During the afternoon the Senatus was "at home" to the rest of the College Staff ; and at the close Mrs. Meston presented the prizes.

Prize winners :—

PUTTING THE SHOT.
1. K. M. Eapen, 2. Kanakadri Rao.

HUNDRED YARDS.
1. A. S. Nadar, 2. Kanakadri Rao.

LONG JUMP.
1. Kanakadri Rao, 2. M. G. Philip.

RELAY RACE :—First Class.

QUARTER MILE.
1. H. B. Philip, 2. K. A. Abraham.

HIGH JUMP.
1. D. A. Cole, 2. Kanakadri Rao.

HURDLES.
1. H. B. Phillip, 2. M. M. Philip.

ONE MILE.
1. A. Eling, 2. C. T. Chinniah.

SACK FIGHT.
1. K. M. Eapen, 2. K. T. Joseph.

FANCY DRESS.
1. A. Yesudasan, 2. Kanakadri Rao.

TUG OF WAR.
The Fourth Class.

CHAMPIONSHIP MEDAL.
Kanakadri Rao.

In the Inter-Collegiate Sports held rather late in the term, K. M. Eapen was again successful, winning first place for Putting the Shot. A. Eling won the Quarter Mile. P. C. Mathan got third place for throwing the Cricket Ball. The College won the Relay Race with a strong team, H. B. Phillips, K. A. Abraham, K. Paulson, S. Rajan, P. Jesudasan, M. M. Philip, Kanakadri Rao and A. Eling.

THE COLLEGE BROTHERHOOD had last year the following office-bearers :—*President* : REV. A. Moffat, LL.D., F.R.S.E. ; *Vice-Presidents* : MR. A. V. Moses, M.A., and MR. S. Subbarama Aiyar, M.A., Dip. Econ. ; *General Secretary* : MR. V. Kannamachary.

The General Committee was divided into three Sub-Committees as follows :—

Sub-Committee for service inside the College :—

Mr. C. Lakshminarayanan, M.A., *(Convener)*, Messrs. C. R. Ratnavelu, S. R. Bhaktavatsulu, K. V. Jagadisan *(Secretary)*, A. Koppu Menon, and P. Dharmapalan.

Sub-Committee for service outside the College :—

Rao Bahadur O. Kandaswamy Chetty *(Convener)*, Messrs. E. A. Pitchai, R. S. Mani, R. Chandramouli *(Secretary)*, C. M. Kuruvilla, and A. Darashaw.

Sub-Committee for literary activities :—

Mr. J. P. Manikam, M.A., L.T., *(Convener)*, Messrs. C. M. J. Gaston, N. J. Chandrasekharan, E. P. Gnanabharanam, V. S. Ramachandran *(Secretary)*, and D. G. Moses.

These sub-committees were guided in their work by the following rules :—

1. The sub-committee for service inside the College shall arrange for social gatherings and excursions, and do everything in their power to help the students of the College, especially those who come up to Madras for the first time.

2. The sub-committee for service outside the College shall arrange for students (1) to take part in the work of the night school, (2) to visit hospitals with a view to read and write letters for illiterate patients, prepare picture scrap-books for them and help them in other ways, (3) to help in temperance, and in health and welfare work.

3. The sub-committee for literary activities shall (1) arrange for lectures, (2) carry on the work of the Second-hand Bookstall, (3) scrutinise and report on the Commonplace Books submitted by competitors.

Lectures were given by Dr. Moffat on *A Visit to Canada* and *A Visit to the United States*, by Mr. Lakshminarayanan on *The Birds of Madras*, and by Mr. A. V. Moses on *The Petrol Motor Engine*.

Excursions were arranged in cooperation with the Natural Science Association to the Red Hills and other places in the neighbourhood of Madras, where Natural History specimens could be obtained and geological formations studied.

Two prizes were offered to students of the First Class for the best Commonplace Books. To guide the competitors the following rules were issued :—

A Commonplace Book is a notebook containing lines of poetry or sentences in prose which are wise observations on religion, study, health, social reform, public life, etc. The rules of the competition were :

(1) The notebook should be either a well-bound book of good paper or a file of the Stolzenberg pattern with sheets of the same size which may be classified and bound.

(2) The quotations should be short, such as those sometimes given in speeches.

(3) Humorous quotations may be included—in fact, any saying which is stimulating, cheering, comforting, illuminating, or otherwise useful.

(4) Quality rather than quantity is desired. The quotations should, as a rule, be in beautiful or pithy language and should not on an average exceed four pages a month.

(5) Each quotation should be given a brief title and at the end in brackets the source, including if possible the name of the author.

E.g., Moral Slavery.

They are slaves who dare not be
In the right with two or three.

(Coll. Mag., Lowell).

(6) The books should be submitted to the Committee at the end of each month for examination.

(7) The prizes will be decided at the end of the year by the results of the monthly scrutiny.

Lord Shaw, the eminent lawyer, says in his autobiography that one of Masson's rules has enriched many a life. 'When anything strikes you in a great poet, mark the passage down and learn it if you can by heart. If you do that, it will go with you to the end of the world. It will become part of yourself. That is culture.' In his own case, he has found this to be a veritable well-spring of joy.

Sir Narayana Chandavarkar was a great reader, says Mr. K. Natarajan, and he was almost ever since his youth a follower of Lord Morley's advice : 'Read with a pen in your hand.' Some scores of notebooks are filled with excerpts and notes from the books which he read.

Dean Inge, of St. Paul's, London, has published in the *Evening Standard* selections from his commonplace books, which are remarkable examples of aphorisms, proverbs, mottoes, etc.

The successful competitors were P. Ratnaswamy and Chacko P. Andrews. The following were commended :—K. Bashyam Naidu, C. Gurudas, M. Jegaroyan, V. John, T. Narayana Rau, L. Nilakantan, T. S. Purushottam, E. Samuels, and A. B. Visvanathan.

The Philosophical Association was revived in August, 1923, Dr. Hogg being elected President of the Association and a Committee formed with Mr. T. Ramaswamayya as Secretary.

At the first meeting the President gave an inaugural address, taking as his subject "The Philosopher in Business." In the course of his address, Dr. Hogg emphasised the difference between the economic conception of wealth which prevailed among business men who were apt to regard wealth as an end in itself and the philosophic conception of it as a means whereby it may promote good social ends. Though this was the right function of wealth, it might, however, in the interim assume all the characteristics of an end in itself.

The second meeting was held in October when the Secretary read an essay on "Personality." He said that personality was a phenomenon peculiar to man among the animals. It made its appearance at those points where man transcends his animal life and which constitute in their entirety his moral world. All the disciplines of our moral life find their ultimate truth and meaning in our association with the Infinite, whose constitution necessitates divine nature in us. This association comes through the realisation of our personality in the social and moral realms, and there cannot be anything vicarious about it.

The third meeting was held in November, at which Mr. B. Sivaraman read an essay on "Courage." He analysed this temperament and showed that it was very hard to maintain it as a virtue under all circumstances. If one were very cautious, it degenerated into cowardice, while if one were rash it became foolhardiness. Other subjects were arranged for the short term but for various reasons it was found impossible to have meetings of the society in that term.

At the beginning of last year Dr. A. S. Woodburne, Professor of Psychology in this College at the request of the University of Madras delivered a series of lectures on 'Psychological Tests of Mental Abilities' and these lectures aroused much interest and appreciation throughout South India. Under the auspices of the University Dr. Woodburne is to deliver another series of lectures on Modern Developments in Educational Psychology. These lectures will be delivered in the Senate House during the term after Michaelmas.

An event of some significance took place at the end of last term when the members of all College hostels were entertained at a social gathering on the terrace of College House. The Superintendents and Managers of the Hostels were the hosts. "Hostel day" which is an annual celebration confined to the members of each hostel has now become a regular feature of hostel life in all hostels and the inter-hostel party got up on the 15th March is the logical development of "Hostel Day." Under the clear tropical moon on the spacious terrace of College House it was a refreshing sight to see the European and the Indian, the Brahmin and the non-Brahmin, the Muslim and the Hindu, the Christian and the non-Christian fraternising together, and enjoying the sumptuous repast in absolute forgetfulness of race, caste or creed. While things are as they should be here was a practical demonstration of one of the achievements of the College not through the practice of Satyagraha but through preaching and living the life of Him who taught the brotherhood of man and was crucified in consequence. Representative speakers from the hostels expressed in eloquent terms their appreciation of the happy gathering and emphasised the spirit it betokened. Mr. Sabhesan on behalf of the hostel managements thanked the members for responding so heartily and in such large numbers to their invitation, and expressed the hope that the cordiality that subsisted between the staff and students and between students and students—a distinction that distinguished this institution from other educational institutions—may grow from more to more.

THE NEWS THAT THE REV. K. C. MACARTNEY, M.A. has resigned his English professorship in the College will be received by his past and present students throughout the Presidency with very real regret. Mr. Macartney who is now in England has not been in the best of health for the last one year and more, and his doctor has now expressed the opinion that Madras climate is injurious to his health, especially to his vision. This verdict of the doctor will be received with widespread regret. It is not merely that his Colleagues in the College will miss a cultured friend but Indian students will miss one of the greatest English professors who ever came to India to expound the beauties of English Literature to Indian students. Mr. Macartney joined the staff of this College as Professor of English in 1913, and the students immediately recognised in him a brilliant scholar and a keen critic of English literature. A born teacher with a magnetic personality, his lectures were very impressive and the attitude of the students towards him resembled the devotion of a chela to his guru. Remembering all that he has done for this College and for the students of this Presidency, we can only wish him in the circumstances a happy time at home, trusting that under the bracing climate of his native land his health will improve.

RAO BAHADUR O. KANDASWAMY CHETTY, Senior Lecturer in English left for England in January on one year's leave in connection with the British Empire Exhibition. This is the second visit Mr. Kandaswamy Chetty pays to England and there is no doubt that the amount of knowledge Mr. Kandaswamy Chetty will be able to gather on this occasion will be immense. Mr. Kandaswamy Chetty is a leader of public opinion and this visit will enable him to enlighten the people of this Presidency on the resources and greatness of the British Empire.

MR. E. BARNES, PROFESSOR OF CHEMISTRY, has gone on one year 's furlough. He goes by the Pacific route visiting on his way China, Japan and America. When Mr. Barnes returns to Madras he will be able to give his observations on the Pacific problem which looms so largely now in international politics.

MR. F. W. HENDERSON RETURNED from his furlough in May. We are glad to welcome Mr. and Mrs. Henderson back to Madras and to the College.

WE ARE DELIGHTED TO HEAR THAT Mr. C. Madhavan Nair has been appointed a Judge of the Madras High Court. Not long ago we congratulated Mr. Madhavan Nair on his appointment as Advocate-General and we anticipated then that his elevation to the Bench was only a question of time. We need hardly add how fully we endorse the choice of His Majesty's Government because Mr. Madhavan Nair is exactly the type of man fitted by temperament, training and culture to hold one of the highest judicial offices in India. Grave by nature, Mr. Madhavan Nair studiously avoided the lime light and excitement of politics. Learned in Law he is severely impartial and he can be trusted to maintain and add to the dignity of the Bench. We offer our congratulations to Mr. Justice Madhavan Nair.

ON THE OCCASION OF THE THIRTY-SEVENTH ANNIVERSARY of the College Andhra Bhashabhi Ranjani Sanghamu which was celebrated in the Anderson Hall on the

possessed of unique power, in the offices which he filled his unflagging enthusiasm and administrative skill had their fullest exercise, into all the spheres of college life he brought the result of rich experience and the benefit of sympathy, and there was no member of the staff but recognised in him a true and ready friend and counsellor. The Council would assure Dr. Macphail that their most sincere good wishes attend him in the discharge of the exacting duties of his responsible position as Vice-Chancellor."

After referring to the appointment of Mr. Meston as Principal and to other changes in the staff, the Report gives the following review of the financial position of the College :—

" The amount expended by the Council on the actual running costs of the School and College, during the financial year ended December 31st, 1923, was Rs. 2,46,400 or roughly Rs. 5,500 more than during the previous year. The increase is due to the operation of scales of salaries and to the amount expended on science apparatus towards which Government grant, though admitted, has not been paid. That the increase is not much larger is due solely to the fact that expenditure under all budget heads has been rigorously cut down, while the staff has likewise been reduced to a bare minimum. Nothing, for instance, beyond the most essential repairs has been undertaken, in order to make income and expenditure balance. Although it is gratifying, from a purely financial point of view, to be able to report that there has been no actual deficit during the year under report, the Council are fully sensible of the unsatisfactory financial position of the College as a whole, and would again invite the serious attention of the Governing Board thereto, with a view to minimising the sense of insecurity and financial anxiety which has for some years past constantly menaced the College, and in some degree impaired its usefulness. The Council, at the same time fully realise the difficulties of the Contributing Bodies and gratefully acknowledge the continued enhancement of contribution which the majority of them have made to the College. The Home Churches and Missionary Societies gave contributions which realised Rs. 58,703; the fees collected amounted to Rs 1,40,421; the Government paid grants totalling in all Rs. 43.571; and admitted liability for grants amounting to Rs. 4,105 which will be paid when funds become available; whilst the sum of Rs. 1,368 came from miscellaneous sources. To the Governing Board and the Contributing Bodies the Council desire to express their sincere thanks for all that they have done to support the College and to extend its influence. They would, at the same time, commend afresh to the Governing Board the suggestion made in last year's report regarding the advisability of so changing the basis of constitution that the sum entitling a church or society to become a contributing body should be not less than £400 per annum. The Council would also respectfully thank Government for a teaching grant of Rs. 42,117, and a special grant for the School of Rs. 1,454. They desire, however, to draw the attention of Government to the strain which is placed upon the management through the slight reduction of the teaching grant already admitted. In view of the service rendered to the Presidency by the College they trust that Government will take the earliest opportunity of aiding it with adequate financial assistance. A comparison of the accounts for 1924 with those of the previous year show that the contribution made by the management in 1923 towards the current expenses of School and College has increased by approximately Rs. 5,700 over that of 1922. This is largely accounted for by the payment of natural increments to salary according to scale, and by the special allotment of roughly Rs. 1,000 in order to maintain the library in the absence of Government grants. The Council are able to carry forward to 1924 a working balance of Rs. 25,000. Thus, as was the case last year, the position so far as current income and expenditure are concerned, is satisfactory; but there are two funds which greatly upset that satisfaction. Although the Council saw their way to allocate approximately Rs. 2,200 to the College Park Hostel Account, the debit balance in connection with that fund and the Malabar Christian College Account now stands

is taken of the all-important matter of personal intercourse between teachers and taught the staff falls short of the minimum. No wonder that at times during the year there crept over the College a feeling of inability to meet adequately the responsibilities which devolved upon it. But if the task before the College seemed, in the light of its resources, almost too great for it there were two considerations which enabled it not only to face that task but also with some measure of success to accomplish it. In the first place the College was supported by the loyalty of staff and students, a loyalty which came as an inspiration and proved the happy means of binding all together in the fulfilment of a common aim. In the second place the College proved once more, as it has proved in the past, the truth of the words, "Hitherto hath the Lord helped us." And it s upheld by the conviction that He who has used it for His gracious purpose in the days gone by is fitting it for still further use in the days that are to come. And in the confidence of this assurance the Council would close the record of another year's work."

IT IS A PLEASURE TO WELCOME to the College Mr. J. Russell Macphail, M.A. who arrived in time for the opening of the new academic year. He comes as a welcome addition to the staff in the English department.